

# The Mining Journal

## RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1883.—VOL. XLI.

LONDON, SATURDAY, SEPTEMBER 23, 1871.

(WITH SUPPLEMENT) {PRICE ..... FIVEPENCE.  
PER ANNUM, BY POST, £1 4s

### MR. JAMES CROFTS, STOCK AND SHAREBROKER, No. 1, FINCH LANE, CORNHILL.

HOLDERS of mining shares DIFFICULT OF SALE in the open market may find purchasers for the same through Mr. CROFTS' agency. Also parties requiring advice how to act in the disposal of abandoned or doubtful mining stocks may probably avail of Mr. CROFTS' long experience on the market in all cases of doubt or difficulty, legal or otherwise.

**CASTLE AN DINAS TIN MINER (LIMITED).**  
This mine (St. Columb, Cornwall) is now in full work, and making regular profits. A minimum dividend of 10 per cent. is guaranteed for three years, from January, 1871, but the profits are expected to give a much higher return. The shares are limited to £2 each, and FULLY PAID, so there is no liability whatever. Mr. CROFTS strongly recommends these shares, in which he has SPECIAL BUSINESS.  
Business in GREAT ROYALTON and ROCHE CONSOLS.  
Every description of shares bought and sold at NET prices.  
Bankers: Metropolitan Bank.

### MR. W. H. BUMPUS, STOCK AND SHAREDEALER, 44, THREADNEEDLE STREET, LONDON, E.C., has FOR SALE the following SHARES, free of commission:

100 Anglo-Austral, fully paid, 17s. 6d.	10 East Caradon, £2½.	40 Pennerley, £4½.
20 Ashton, £1½.	5 East Lovell, £8½.	50 Prince of Wales, 18s. 6d.
10 Birdseye Creek, £4.	20 East Grenville, £3½.	15 Roman Grav., £19½.
30 Bog, £2½.	50 Frontino, 5s.	80 Rhydallog, fully paid, 37s. 6d.
75 Chontales, fully paid, £2½.	10 Great Vor, £10.	20 South Aurora, £3.
10 Crenver & Abraham, £2½.	15 Great Retallack, £17½.	30 Sweetland, £3½.
50 Caegynon, 22s.	15 Great Laxey, £17½.	25 So. Condurrow, £10½.
10 Carn Camarac, £33½.	40 Gt. No. Laxey, 17s. 6d.	50 So. Rom. Grav., 19s.
3 Cook's Kitchen, £33½.	20 Mark Valley, £25½.	10 Tankerville, £16½.
10 Don Pedro, £3 15s.	25 New Lovell, £2½.	15 Utah, £10½.
20 Drake Wallis, 16s. 6d.	40 No. Tankerville, 19s. 6d.	5 W. Rose Down, 17s. 6d.
20 East Van, £12.	30 Old Bathols, 28s. 6d.	30 West Maria, 17s. 6d.
10 Eberhardt, £36.	50 Pacific, £1½.	30 Willoughby, £2 8s. 9d.
10 Elipse, 20s.	25 Parys Mountain, £3.	3 W. Chiverton, £18.
50 E. Langynog, £2 18s. 9d.	10 Polbreon, £2½.	50 Wheal Arthur, 20s.
	60 Perkins Beach, £7½.	20 Wh. Grenville, £7½.
	50 Plynlimmon, 37s.	

W. H. B. transacts business in every description of shares at the best market prices, and free of commission.  
Bankers: National Provincial Bank of England, E.C.

### MR. Y. CHRISTIAN, STOCK AND SHAREDEALER, 11, ROYAL EXCHANGE, E.C.

Bankers: Bank of England.

### MR. WILLIAM SEWARD, STOCK AND MINING SHARE BROKER, 19, THROGMORTON STREET, LONDON, E.C.

Every description of shares BOUGHT and SOLD at the best market prices.

### MR. C. POWELL, STOCK AND SHAREDEALER, 78, OLD BROAD STREET, LONDON, E.C.

Bankers: Bank of England.

### MR. THOMAS SPARGO, MINING ENGINEER, STOCK AND SHAREDEALER, 224 AND 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.

Bankers: Bank of England.

### MR. THOMAS THOMPSON, JUN., STOCK AND SHAREDEALER AND MINE AGENT, 5, WHITEHALL, LONDON, S.W.

Some valuable hints as to the purchase of mining shares will be found in Mr. THOMPSON'S "Investment Circular" for September; now ready; post free, price 6d.

### MR. JAMES STOCKER, STOCK AND SHAREDEALER, 2, CROWN COURT, THREADNEEDLE STREET.

Bankers: London and Westminster (Established Twenty Years).

### MESSRS. WM. MARLBOROUGH AND CO., 29, BISHOPSGATE STREET WITHIN, LONDON, E.C. (Established 17 years), have FOR SALE the FOLLOWING SHARES at prices annexed:—

10 Almaden, £1 18s. 9d.	10 East Van, £12.	50 Perkins Beach, 31s.
10 Aberdauant, £2½.	25 E. Grenville, £2½.	50 Plynlimmon, 38s. 9d.
25 Bronfloyd, £2 11s. 3d.	5 Eberhardt, £18½.	5 Roman Grav., £18½.
30 Buich Consols, 27s. 6d.	10 East Pool, £13½.	20 Rosewall Hill, 20s. 6d.
40 Bog, £2½.	20 Frank Mills, 20s. 9d.	10 So. Condurrow, £10½.
10 Birdseye Creek, £4.	100 Flor. and Tonkin, 6s.	25 Sweetland, £3 17s. 6d.
30 Cathedral, 22s. 6d.	30 Great Western, 30s. 9d.	30 South Aurora, £2 18s. 9d.
3 Cook's Kitchen, £33½.	5 Great Laxey, £17.	50 So. Rom. Grav., 17s. 9d.
10 Calbeck Fells, £1¼.	50 Gwydyr Park, 18s. 9d.	20 So. Carn Brea, 47s. 6d.
2 Carn Brea, £14.	20 Great Lovell, 20s.	40 Sierra Buttes, £23 9s.
40 Caegynon, 22s.	25 Gt. No. Laxey, 18s.	10 Tankerville, £16½.
10 Cape Copper, £7½ pm.	40 Lovell, 2s. 9d.	2 Tincroft, £49 8s. 9d.
15 Colorado, £2 11s. 3d.	20 North Pool, £3.	10 Tankerville, £16½.
10 Cwm Ricket, £14.	20 New Hingston, £24½.	2 Tincroft, £49 8s. 9d.
20 Don Pedro, £3 15s. 3d.	20 New Lovell, 48s. 9d.	10 Terras, 58s. 9d.
40 Drake Wallis, 14s. 6d.	5 Providence, £24½.	100 Taguarril, 6s. 3d.
10 Doreen, £184.	25 Pennerley, £4½.	10 Utah, £10½.
10 Elipse, 20s.	50 Powell United, £24.	50 Van Consols, 28s. 3d.
10 Great Vor, £10.	20 Pacific, £2 3s. 9d.	20 W. Tankerville, £13 6d.
50 E. Langynog, £2½.	20 Pinto, £4½ pm.	50 W. Drake Wallis, 3s. 6d.
10 East Lovell, £12½.	75 Prince of Wales, 17s. 3	40 Wheal Awar, 30s.
	30 Parys Mount, £23 13	3 Wh. Bu. l., £31¾.
		5 W. Chiverton, £18.

### WHAT PAYS BEST?—A PRACTICAL TREATISE UPON INVESTMENTS IN BRITISH AND FOREIGN MINES.

W. MARLBOROUGH AND CO.,  
29, Bishopsgate-street Within, London.  
Post free Sixpence.

### HOOKE AND CO. STOCK AND SHAREDEALERS, LIFE, FIRE, AND MARINE INSURANCE AGENTS, 9, UNION COURT, OLD BROAD STREET.

At the rate of One Guinea per annum, we give investors information on legitimate mining properties in the United Kingdom.

### MR. HENRY MANSELL, STOCK AND SHAREDEALER, 34, GREAT WINCHESTER STREET, LONDON, E.C.

AN OFFER WANTED for the following shares (or any part of same):—

10 Tankerville, £16½.	5 Cook's Kitchen, £30½.	75 Gwydyr Park, 18s. 9d.
30 Bog, £2 11s. 3d.	35 Wheal Crebor, £17.	15 W. Tankerville, £13 6d.
25 Great Royalton, £2½.	10 Utah, £10½.	45 East Rhydallog, £18.
25 Great Uuy, £2½.	35 Ruellan Copper, £7½.	15 Great Vor, £10.
25 Llanarmon, £2 5s.	50 Wheal Lucy, £18 6d.	50 So. Herodfoot, offer wanted.
25 Sweetland, £3 17s. 6d.	15 Wh. Grenville, £7 18 6	100 East Langynog, £18.
10 Elipse, 20s.	5 Eberhardt, £18½.	20 North Crofty, £10.
10 Pennerley, £4½.	35 Perkins Beach, £17 6	110 East Terras, 20s.
10 New Beldon, £18.	25 Terras Tin, £18 6d.	35 Drake Wallis, 16s. 6d.
5 W. Chiverton, £17 14s.	45 Rhydallog, £18 6d.	8 Roman Grav., £18½.
5 Great Lovell, offer 14s.	50 So. Roman Gravels, £18½.	

MR. HENRY MANSELL LEAD MINING COMPANY (LIMITED).—Mr. HENRY MANSELL strongly recommends the immediate purchase of these shares for a great advance in price. A detailed report on application; and specimens of the ore just brought from the mine can be seen at the above address.  
GREAT VOR, SOUTH CONDURROW, and WEST CARADON shares are also safe to buy at present quotations.  
References exchanged.  
Daily List of Latest Prices sent free on application.

### MR. GEORGE BUDGE, STOCK AND SHAREDEALER, No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 21 years), is a SELLER at net prices of:—

10 St. Agnes Consols, 10	10 Wheal Kitty (St. Agnes), 10	4 East Darren, 3
10 Perkins Beach, 31s.	50 East Caradon, 50	65 East Langynog, 30
10 Wheal Lucy, 20s.	50 East Grenville, 65	65 East Langynog, 30
40 South Darren, 45	100 Wheal Crebor, 150	50 Gwydyr Park, 3
10 East Van, 15	50 North Crofty, 100	100 Wheal
10 Buich Consols, 27s.	100 Wheal Awar, 100	100 New Beldon,
10 W. Tankerville, 13s.	100 Wheal Arthur, 100	100 East Caradon, 45
10 Prince of Wales, 17s.	100 Wheal Lucy, 100	100 East Grenville, 65
100 Frontino, 5s.	100 Wheal Lucy, 100	100 East Grenville, 65

SPECIAL BUSINESS in Devon Great Consols, Poldice, Cook's Kitchen, Minera, New Pumbroke, Lisburn, Perran Wheal, Virgin, and Trevarrack.

### WEST CARADON MINE.— Particulars of the recent discoveries at this mine will be found in PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST," No. 653, of Friday, Sept. 22, 1871. Price 6d. each, forwarded on application.

### MR. PETER WATSON, STOCK AND SHAREDEALER, 79, OLD BROAD STREET, LONDON, E.C.

Bankers: The Alliance Bank, and Union Bank of London.

### TANKERVILLE—ROMAN GRAVELS.— PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST," No. 653, of Friday, Sept. 22, contains the latest particulars of the above, and also of the LEADING COPPER and TIN MINES of CORNWALL.

### WEEKLY MINING CIRCULAR, EVERY FRIDAY.— LONDON DAILY RECORD, STOCK & SHARE LIST, Every Evening. Published by P. WATSON, Stock and Sharedealer, 79, Old Broad-street, E.C.

### M. B. W. H. C. U. E. L. L., No. 45, CORNHILL, LONDON, E.C.

Daily price-list on application.

### MR. E. J. BARTLETT, STOCK AND SHAREDEALER, No. 30, GREAT ST. HELEN'S, LONDON, E.C., transacts business at net prices in every description of security.

### MESSRS. W. DUNN AND CO. STOCK AND SHARE- DEALERS, 3 AND 4, GREAT WINCHESTER STREET BUILDINGS, LONDON, E.C.

Bankers: National Provincial Bank of England.

FOR SALE, at prices affixed:—  
20 Bog, £2 10s. 5 Eberhardt & Aurora, 25 So. Roman Grav., 10s.  
10 Bronfloyd, £2 7s. 6d. 50 Gt. No. Laxey, 17s. 9d. 10 Sweetland, £3 15s.  
25 Cashwell, ex div., £3 50 Gt. No. Laxey, 17s. 9d. 10 Tankerville, £16 5s.  
25 Caegynon, £1 10s. 10 New Lovell, £2 10s. 30 Terras.  
40 Cefu Consols, £5 fully paid, £1 12s. 6d. 25 No. Tankerville, 18s. 9d. 50 Van Consols, £1 5s.  
25 Cathedral, £2 5s. 40 North Pool, £3 10s. 10 West E-gair Lie, £2.  
25 Chontales, £2 5s. 40 Penhalis, £4½. 3 W. Chiverton, £17 15s.  
3 East Basset, £3. 10 Pacific, £2 2s. 6d. 50 West Jewell, £1 15s.  
10 East Langynog, 30 Perkins Beach, £1 11 6 50 Wheal Kitty (St. Agnes), £10 10s.  
5 East Lovell, £12 2s. 6d. 30 Rhydallog, £1 11s. 10 Wheal Lucy, £3.  
20 East Rhydallog, 10 So. Condurrow, £10½.

### EAST LLANGYNOG.—A large amount of business is being done in the shares of this undertaking. Purchasers of shares for cash will find it to their advantage to apply to the undersigned. T. E. W. THOMAS, 3, Great Winchester-street-buildings, E.C.

### EDWARD BREWIS AND CO., 18 AND 19, BISHOPSGATE STREET WITHIN, CITY, LONDON, E.C.

Mr. BREWIS begs to draw attention to the prospects of EAST BOTTLE HILL  
MINING COMPANY (LIMITED) in the Mining Journal of Sept. 5. The main lode  
will soon be cut, and shares rise 300 per cent.  
Bankers: Alliance Bank (Limited), Bartholomew-lane, E.C.

### SILK AND CO. STOCK AND SHARE BROKERS, 32, REGENT STREET, PICCADILLY, W.

FRANK LEMMER, Secretary.

### MR. C. A. POWELL, STOCK AND SHAREDEALER, No. 1, PINNER'S COURT, OLD BROAD STREET, E.C.

References exchanged. Bankers: City Bank, Finch-lane.

### MR. F. W. MANSELL, STOCK AND SHAREDEALER, 1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C.

Daily List of closing prices in British and Foreign mines every evening (free).  
References exchanged. Bankers: London Joint-Stock Bank.

### WHEAL GRENVILLE, EAST WHEAL GRENVILLE, Treleigh Wood, West Caradon, Wheal Lucy, New Rosewarne, and Wheal Crebor Mines specially recommended. Wheal Grenville shares, in all prob- ability, will be worth £20 each; East Grenville, £10; Treleigh Woods, £150; West Caradon, £27; Wheal Lucy, £20; New Rosewarne, £150; and Wheal Crebor, £5.

MR. JOHN BISLEY (SWORN) STOCK AND SHARE BROKER,  
77, CORNHILL, LONDON, E.C.

### MR. W. TREGELLAS, 122, BISHOPSGATE STREET WITHIN, LONDON, E.C., is PREPARED TO DEAL in all descriptions of STOCKS and SHARES at close market prices.

W. T. strongly recommends for investment the shares of the ECLIPSE GOLD  
MINING COMPANY, which will soon be in a condition to make large returns of  
gold and silver.

W. T. also recommends the purchase of shares at once in NEW WHEAL CHAR-  
LOTTE TIN AND COPPER MINE COMPANY (LIMITED), St. Agnes, Cornwall, full  
particulars of which can be had on application.  
Bankers: Imperial Bank.

### FOR SALE:— 10 Marke Valley, 10 East Van, 2 Providence, £24. 4 Buller, 10 Tankerville, 25 Gt. No. Laxey, 17s. 9d. 5 West Chiverton, 5 Mary Ann, 20 So. Rom. Grav., 21s.

WANTED.—East Caradon, £4½. East Basset, £5½. Drake Wallis, 15s.  
East Sennen. Rosewall Hill, 17s. 6d. West Frances.

Those replying state number.  
Mining shares of every description bought and sold on application to Mr.  
JAMES BRENCHELY, 32, Nicholas-lane, Lombard-street, London.  
(Established Seventeen Years.)

### MESSRS. J. HUME AND CO., 74, OLD BROAD STREET, LONDON, E.C.

FOR SALE.—  
10 Utah, £17. 20 Kansas, £3 pm. 20 W. Tankerville, £23½.  
10 Eberhardt, 50 Taguarril, 6s. 9d. 10 Tankerville, £16½.  
20 Don Pedro, 20 Don Pedro, 10 Pennerley, £4½.  
20 Richmond Con., £29½. 10 Great Vor, 25 Birdseye Creek, £4½.  
prem. 10 So. Condurrow, £10½. 20 Bog, £23½.  
10 Carn Brea, £146.

We recommend for immediate purchase and for a great rise EBERHARDT,  
KANSAS, RICHMOND CONSOLIDATED, and UTAH.  
BUYERS of New Lovell shares, at 22½ per share.  
Shares bought and sold at closest prices.  
Telegrams promptly attended to.

### MESSRS. ENDEAN AND CO. STOCK AND SHARE DEALERS, 55, GRACECHURCH STREET, LONDON, E.C.

We strongly advise the prompt purchase of shares in the EAST LLANGYNOG  
LEAD MINING COMPANY (LIMITED). This mine will shortly pay a dividend.  
Apply at once for shares as above.

Our clients will remember that we have from the first advised the purchase  
of the TERRAS TIN shares, believing it to be, from our own inspection, one of  
the best tin-paying properties in the West of England. We have now only a  
limited number of shares for sale. We have 50 for sale, or any portion, at £3  
each if applied for at once.

Great discovery of copper in the FRANCO CONSOLS TIN AND COPPER MINE.  
See Telegram at the office. The lode is similar in its character to the Devon  
Consols lode, and the mine is in the same district. You will do well in applying  
promptly for shares. We have 75 for sale, or any portion, at 25s. each for  
prompt reply.

ENDEAN AND CO., 55, Gracechurch-street, London, E.C.

### THE CITY EXCHANGE MINING AND INVESTMENT OFFICES, 32, NEW BROAD STREET, LONDON, E.C.

ALFRED FISHER, MANAGER.  
Business transacted in all marketable securities for cash or account.  
Westonbury and the purchase of EAST LLANGYNOG, FRANCO CONSOLS, and  
TERRAS TIN shares. Telegram sent received—Great discovery of copper in  
Franco Consols, Devon Consols district. Apply promptly for shares.

We have the following shares for sale, or any part:—50 East Langynog, at  
£3 each; 75 Franco Consols, £1¼; 50 Terras also for sale.

### M. B. CHARLES THOMAS, MINING AGENT, 3, GREAT ST. HELEN'S, LONDON, E.C.

### MESSRS. A. W. THOMAS AND CO., 10, COLEMAN STREET, E.C., MINING AGENTS, AND STOCK AND SHAREDEALERS.

Monthly Circular for September now ready; post free, 6d.

### MESSRS. G. LAVINGTON AND A. PENNINGTON, 44, THREADNEEDLE STREET, E.C., STOCK AND SHAREDEALERS.

have BUSINESS in the undermentioned:—  
Birdseye, Kitty (St. Agnes), Pacific Gold.  
Bog, Mary Ann, Sweetland Creek.  
Eberhardt, Powell United, South Aurora.  
Eclipse, Pennerley, Utah.  
Great Wheal Vor, Perkins Beach, West E-gair Lie.  
Parties wishing to purchase or sell in the foregoing are requested to make  
early application.  
WANTED—100 Pacific. SPECIAL BUSINESS in Tankerville.  
LAVINGTON AND PENNINGTON, SWORN BROKERS.

### TO INVESTORS.—NOW READY. LAVINGTON AND PENNINGTON'S "MONTHLY RECORD OF INVESTMENTS," containing an exhaustive Review of the British and Foreign Stock and Share and Money Markets, &c., with an enumeration of safe investments, paying from 10 to 20 per cent. Price 6d. per copy, or 5s. annually. G. LAVINGTON AND A. PENNINGTON, 44, Threadneedle-street, London, E.C.

SHARE INVESTMENTS.—Shares in good mines are now in  
great demand, and may be bought to give early and large profits if judi-  
ciously selected. The undersigned, having had considerable practical experi-  
ence, offers his services to investors, and will furnish a list of his selections, both  
for permanent dividends and for a quick market rise.

T. E. W. THOMAS, Stock and Sharedealer, 3, Great Winchester-street-build-  
ings, E.C. Established 1867.

N.B.—Mr. THOMAS, being an independent dealer, issues no circulars to induce  
capitalists to purchase shares that are unknown in the stock market.

### SHARES WANTED, FOR CASH:— 25 CALDBECK FIELDS, 5 DOLCOATH. 50 WHEAL KITTY (St. Agnes), 25 TINCROFT. 15 EAST POOL, 50 EAST VAN. 100 PENNERLEY, 50 CARN BREA.

Sellers will please state number and lowest price.  
FOR SALE:—10 PROVIDENCE, 1 22 WEST FAN-Y-GO.  
MESSRS. GOULD SHARP AND CO., SHARE BROKERS,  
33, POULTRY, LONDON, E.C.

### SHOULD BE SOLD:—Eclipse, Buller, West Chiverton, and Mary Ann. SHOULD BE BOUGHT:—Carn Brea, South Frances, East Basset, Taguarril, and others, on application. H. B. RYE, Stock and Sharebroker, 77, Old Broad-street, E.C.

### MR. T. A. MUNDY, STOCK AND SHAREBROKER, 38, BISHOPSGATE STREET WITHIN, E.C.

Bankers: City Bank.

### BARTLETT AND CHAPMAN, STOCK AND SHARE DEALERS, 36, CORNHILL, LONDON, E.C.

"Handybook for Investors," price 19s. 6d., post free.  
"British Mines and Mining," price 2s. 6d., post free.

### IMPORTANT TO INVESTORS IN BRITISH AND FOREIGN MINES, RAILWAY STOCKS, and other Securities of all descriptions.

Dividends at the rate of 5, 10, and 15 per cent.  
Consult Mr. JOHN B. REYNOLDS' SPECIAL LIST OF INVESTMENTS.  
Sent free by post on application to JOHN B. REYNOLDS, Stock and Share  
Dealer, 70 and 71, Bishopsgate-street Within, London, E.C.

### MR. W. E. JOHNSON (late Secretary of the Mining Exchange) begs to OFFER his SERVICES to the public in the PURCHASE and SALE of STOCKS and SHARES in MINES, RAILWAYS, FOREIGN BONDS, &c. Having had over 17 years' experience, and a thorough knowledge of the business, he is in a position to act advantageously for his clients. 19, Pinner's-hall, Old Broad-street, London, September, 1871.

### MESSRS. HITCHENS AND CO., NEW POULTRY CHAMBERS, LONDON, E.C., MINERAL AGENTS AND SURVEYORS.

Capt. S. EDDY MARTIN, Mining Engineer and Surveyor, and for many years  
connected with the celebrated Lisburne Mines, Cardiganshire, and now re-  
siding in Montgomeryshire, is one of the above firm. His services can be ob-  
tained to survey, inspect, and report on mining properties in the Principality,  
and, from his long connection with Welsh mining, investors should avail them-  
selves of his services, which would guide them to safe and sure investments.

All communications to be addressed as above, to which prompt attention will  
be given.

HITCHENS and Co., from personal inspection, can name three mines on which  
a great rise must take place on their merits.

H. and Co. can also name a commercial undertaking that will pay from 15 to  
20 per cent., the same being a safe investment.

### MR. JOHN CARTER, MINE AND SHARE DEALER, CAMBORNE, CORNWALL (Son of the late Thos. Carter), transacts Business in every description of shares at close market prices of the day. References exchanged when required.

### MR. T. W. GREENFIELD, CHURCH LANE, TAVISTOCK.

PUBLIC ACCOUNTANT, AUDITOR, STOCK AND SHARE BROKER.  
Sales and Purchases effected in British and Foreign Stocks, Funds, Railway  
Debentures and Preference Stock, Bank, Gas, and Mining Shares.  
FURZE HILL TIN MINE specially recommended.

### MESSRS. W. BRUNTON AND CO., SAFETY FUSE MANUFACTURERS.

REDBRUTE, CORNWALL; and RYMBY, SEAB WREXHAM.

### THE LONDON STOCK AND SHARE AGENCY, 165, STRAND, LONDON.

Stock and Sharebrokers' Commissions executed in every kind of security for  
capitalists and trustees.

This Agency particularly recommends an immediate purchase of the CASTLE  
GATE TIN and the CASTLE AN DINAS TIN Mining Shares as the best mineral  
investments of the day.

### THE LONDON AND PROVINCIAL INVESTORS' SHARE EXCHANGE (POWELL, DIXON, AND CO.).

26, CHANGE ALLEY, LOMBARD STREET, LONDON, E.C.  
BUY and SELL every description of Stocks and Shares at close market prices  
net. Exclusive and reliable information on all the market mines.

### EAST BOTTLE HILL MINING COMPANY (LIMITED).

The SHARE LIST will CLOSE for LONDON on SATURDAY, Sept. 23rd  
Instant, and MONDAY, 25th instant, for the COUNTRY.  
By Order, E. BREWIS, Secretary.

A dividend of 7s. 6d. per share was declared last week in the adjoining mine,  
working on part of the same lode.  
Plans and prospectuses may be had at the offices of the company, 19, Bishop-  
gate-street Within, City, London, E.C.

### THE AUSTRALIAN AND NEW ZEALAND DIVIDEND GOLD MINES INVESTMENT COMPANY (LIMITED).

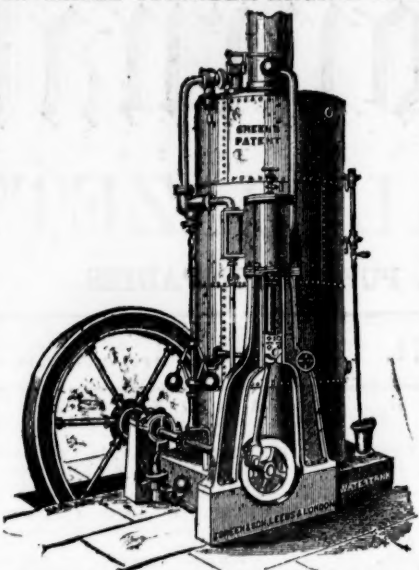
No. III. SERIES.  
The SHARE LIST will CLOSE THIS DAY, 23rd September Instant.  
THOMAS DICKER, Secretary.  
Offices, 4, Royal Exchange-avenue, London, E.C.

THE GOLD MINES OF VICTORIA AND NEW ZEALAND.—  
SPECIMEN COPIES OF DICKER'S "AUSTRALIAN AND NEW ZEALAND  
GAZETTE" may be had FREE by forwarding address and stamp to the office,  
4, Royal Exchange-avenue, London, E.C.



## GREEN'S PATENT BOILERS, WITH INVERTED CYLINDER ENGINE COMBINED

Specially adapted for Contractors, Joiners, and Builders, Cabinet-makers, Brick-makers, Farmers, Mills, Dyehouses, Workshops, Printing-offices, &c.



For Exportation they are invaluable, being sent out in complete working order, ready for immediate use.

The above Engines and Boilers are constructed in an exceedingly substantial and simple manner, every part being easy of access, consequently can be readily understood and managed; they are fitted with governors, equilibrium throttle valve, stop valve, safety valve, feed pump, water and steam gauges complete. The foundation plate answers the purpose of feed water tank, in which the water is heated before passing into the boiler, and also of an ash-pan, and no brickwork or foundation is required.

N.B.—Upwards of 600 of these Engines and Boilers are now at work, giving entire satisfaction.  
Illustrated PRICE LISTS free on application to  
**THOMAS GREEN AND SON,**  
SMITHFIELD IRONWORKS, LEEDS;  
And 54 and 55, Blackfriars-road, London, S.E.

## STEEL! STEEL! STEEL!

TO MINE PROPRIETORS, CONTRACTORS, ENGINEERS,  
AND OTHERS.

**JOHN TURNER'S**  
CELEBRATED DOUBLE-REFINED CAST-STEEL  
FOR JUMPERS AND DRILLS USED FOR HARD ROCK AND MINES.  
Best quality at the lowest manufacturer's price. Delivered free.

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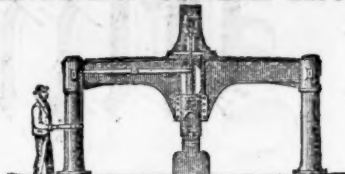
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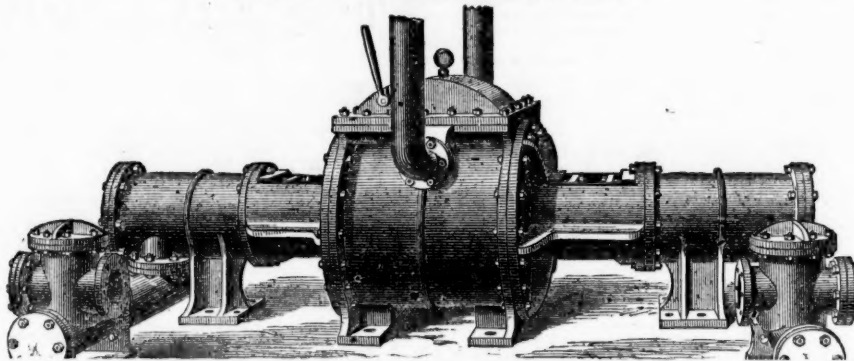
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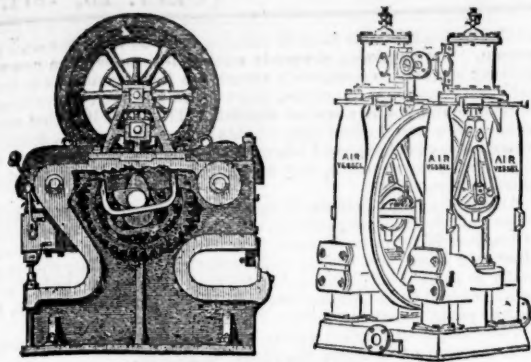
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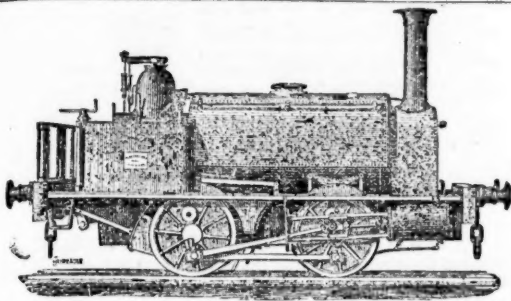
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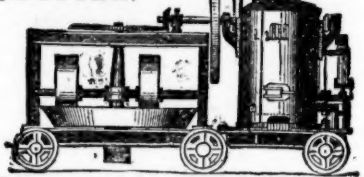


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MACHINERY, and MACHINERY IN GENERAL.

SHIPBUILDERS IN WOOD AND IRON.

### THE PATENT PNEUMATIC STAMPS

May be SEEN AT WORK at HAYLE FOUNDRY WHARF, NINE ELMS

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### ON SALE, ONE PAIR of 20 in. coupled WINDING ENGINES,

almost new. Fitted with slot link motion, wrought-iron cranks, and

crank shaft.

Also, ONE PAIR of 15 in. cylinder WINDING ENGINES, almost new, and

fitted as above.

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### ON SALE, ONE 25-horse power double cylinder PORTABLE

ENGINE, fitted with slot link motion for winding.

Also, 30-horse power double cylinder PORTABLE ENGINE.

ONE 20-horse power double cylinder PORTABLE ENGINE.

Will be sold cheap, and are in first-class order.

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FOR SALE, together or separately, at TEN SHILLINGS EACH

being less than half the selling price, the FOLLOWING MAPS:—

1.—Of the District including Dolcoath, South Condurrow, East Grenville,

Wheal Grenville, Wheal Uny, and other mines attracting much attention in

the market.

2.—Of the Crown and Wheal Abraham District.

3.—Of the District including the Caradons, Marke Valley, Wheal Mary Ann,

and Herodsfoot.

4.—Of the District including East Wheal Lovell, Lovell Consols, North Lovell,

&c., and neighbouring mines.

5.—Of the District including Penhalls, Wheal Killy (St. Agnes), Polbreen

Great West Cliverton, and other mines.

6.—The Miners Lead Mining District of North Wales.

ALL the MAPS are by the well-known mine surveyor, R. SYMONS, of

TRURO, and none of them have been used.

Any one or more will be forwarded on receipt of Post-Office Order for the

amount, by addressing "Commerce," MINING JOURNAL Office, 26, Fleet-street,

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**MR. W. WHITE, ASSAYER AND CONSULTING CHEMIST.**  
In announcing the REMOVAL of his LABORATORY AND ASSAY  
OFFICE from Crown-court to much more commodious premises, 25, FINS  
BURY PLACE, near FINSBURY CIRCUS, hopes to RETAIN the CONFIDENCE  
hitherto reposed in him.  
Assaying taught. Lectures to Schools and Public Institutions.



## Registration of New Companies.

The following joint-stock companies have been registered:—

**NORTH OF ENGLAND VAL DE TRAVERS PAVING COMPANY (Limited).**—Capital 30,000l., in 6000 shares of 5l. each. We lately noticed the formation of a company for carrying on asphalt paving operations in the Midland Counties of England, and the company now under notice is established to carry on a similar business in the Northern Counties—Northumberland, Cumberland, Westmoreland, and Durham—in connection with an agreement existing between Mr. John Slagg, jun., of Manchester, and the Val de Travers Asphalt Paving Company (Limited). Several directors are nominated by the Val de Travers Company; the others are Messrs. James Morrison, William Cochrane, Jonathan Priestman, Thomas Bell, and George Luckley, of Newcastle-on-Tyne.

**GEORGE STARBUCK AND COMPANY (Limited).**—This is another joint-stock association formed to take over and carry on the business of a private firm, this time that of Messrs. Starbuck, of Birkenhead. The capital is 50,000l., in 5000 shares of 10l. each, 3000 of which are to be issued as fully paid up. The promoters of this company are—Messrs. Herbert Heath, Lynwood, Beckenham, 200 shares; John Hockley, Lee Park, Lee, 50; William Martineau, 39, Princess-square, 250; T. S. Hayfield, 69, Cornhill, 100; Thomas Williams, Birkenhead, 50; William Crowe, Birkenhead, 50; N. S. Walker, National Bank-buildings, Liverpool, 100.

**POWELL UNITED LEAD MINING COMPANY (Limited).**—This is a new Welsh mining company, formed to acquire the Powell United Silver-Lead Mine, in the parish of Llanbadarn-fawr, in Cardiganshire. The capital is 48,000l., in 9600 shares of 5l. each. The subscribers are—J. Archer, Blackheath, 40 shares; A. H. Bogle, 20, Westbourne-terrace, 100; E. Miller, Jeffery's-road, Clapham, 1; J. G. Cooper, Bowdon, Cheshire, 100; David Smith, Liddell Hall, Halifax, 100; H. F. Newman, Devonshire-road, South Lambeth, 1; F. A. Foyne, 13, King-street, Cheshire, 50.

**GALYHOG COLLIERY COMPANY (Limited).**—This is a new company formed (with a nominal capital of 20,000l. in 5l. shares), to buy up the property, plant, &c., of the Galyhog and Northrop Colliery Company (Limited). The subscribers are William Jones, Merton Hall, Holywell, 100 shares; D. Milne, Pell-street, Liverpool, 120; J. H. Woistholme, Holywell, 100; William Jones, jun., Mertyn Hall, Holywell, 10; Robert Jones, New Brighton, 10; Andrew Brown, 12, Duke-street, Liverpool, 2; William-Leggs, Hanover-street, Liverpool, 50; Thomas Gee, Denbigh, 20; J. Woodhouse, Oldham, 100.

**FOREIGN TIMES COMPANY (Limited).**—Capital, 20,000l., in 5l. shares. This company is established to purchase copyrights of English and foreign newspapers and other publications, and to publish a new paper, the copyright of the *Foreign Times*, a newspaper is intended to bring out. The promoters are Mr. Sangster, St. Albans; W. H. Patten-Saunders, Russia House, Bayswater; W. Hunnicutt, 41, Trafalgar-road, Old Kent-road; Martin A. Sharp, 21, Lime-street; James Hutchins, 136, Leadenhall-street; J. Farwell, 131, Marylebone-road; William Plank, 2, George-street, Camberwell.

**VALLONGO SLATE AND MARBLE QUARRIES COMPANY (Limited).**—Capital, 20,000l., in 5l. shares. This company, the promoters of which are nearly the same as in the preceding, is formed to acquire and work for gain certain lands, marble quarries, and rock quarries at Vallongo, near Oporto.

**NORTH VAN MINING COMPANY (Limited).**—This company (capital 15,000l., in 3000 shares) is formed to search for minerals in and upon certain lands called Gessilfa, in the parish of Trefeglwys, in Montgomeryshire. The subscribers, who take up one share each, are—T. G. Mundy, 13, Angel-court; Robert Oldrey, Landowne-terrace; Robert Wilson, 12, Brunswick-square, Kensington; John Hurrell, Elm House, North Brixton-road; William Williams, Llandidlo; W. H. Williams, Llandidlo; Walter Eddy, the "Fron," Llandidlo; Mr. J. Mundy, Oldrey, Wilson, and Hurrell are the directors.

**LUKE THOMAS AND COMPANY (Limited).**—Capital, 30,000l., in 600 shares of 50l. each. This company is formed to carry on the business of bankers, general commission agents, wharfingers, lightermen, shipwrights, telegraph proprietors, and workers, and to acquire the business of Messrs. Luke Thomas and Co., of 136, Leadenhall-street, and Aden. The subscribers are—H. H. Potts, 2, East India-avenue, two shares; James Cundy, 136, Leadenhall-street, 2; John Matheson, 138, Leadenhall-street, 2; Walter Henry, 136, Leadenhall-street, 2; John Davidson, Medina, Farquhar-road, Upper Norwood, 2; John Brown, Woon-park House, Kilham-road, Lee, Kent, 2; Luke Thomas, 136, Leadenhall-street, 2. The directors are Messrs. Potts, Cundy, and Luke Thomas.

**EARLE'S SHIPBUILDING AND ENGINEERING COMPANY (Limited).**—Capital, 300,000l., in 6000 shares of 50l. each. In the words of the published prospectus, "this company has been formed for acquiring the shipbuilding and engineering works of Messrs. C. and W. Earle, of Hull, and the business connected therewith, and for working and extending the same. The directors are—E. J. Reed, Esq., C.B., late chief contractor of Her Majesty's Navy, Chairman; Sir John Brown, Knellie Hall, Sheffield; Admiral Sir R. Spencer Robinson, K.C.B., F.R.S., late controller of Her Majesty's Navy; Thomas Bingham, Esq., Kestle-park-gardens, London; John Galloway, jun., Esq. (Messrs. W. and J. Galloway and Son), Manchester; Mr. Reed, the Chairman, has undertaken the management of the company for a period of five years."

**CWM ELAN LEAD MINING COMPANY (Limited).**—Capital 30,000l., in 6000 shares of 5l. each. This company is formed to acquire and work the Cwm Elan Mine, in Radnorshire, North Wales, just south of the well-known Wm. Milne. The subscribers are—Messrs. H. H. C. Wroughton, 3, Victoria-grove-terrace, Kensington, 500 shares; Richard Condy, 18, Garlick-hill, Cannon-street, E.C. 4, 100; Henry Banerfield, 12, Allen-street, Goswell-street, 1000; Thomas Paul, Llandudno, 1000; Frank H. S. Green, 9, Waterloo-place, 100; Rowland Webster, 120, Kensington-park-road, 1000; John Muddelle, Greenhill House, Maidstone, Kent, 100. Major Rowland Webster and Messrs. R. Condy, John Muddelle, and Henry A. C. Wroughton are the directors, and it is announced that a large number of the shares having been privately subscribed for the share list was closed on Thursday, the day after the issue of the prospectus.

**BALTIC COAL ASSOCIATION (Limited).**—This company (capital 100,000l., in shares of 100l. each) is formed to carry on an agency business in coal and other agricultural produce by selling the same on commission. The directors are W. E. Bott, Billiter-street; R. S. Parry, 18, Hanover-street, Hanover-square; F. E. Warburg, 2, Bow-lane, Cheapside; Ernest Woom, 9, Gracechurch-street; and Alexander R. Johnston.

**CO-OPERATIVE COAL SUPPLY COMPANY (Limited).**—Capital 50,000l., in 5l. shares. The approach of winter has, no doubt, called into being this new company, which purports dealing in coal in the same way as many similar companies already registered. The directors are Messrs. H. C. Vernon, Jacob Solomon, H. H. Murray, G. P. Moore, and Jesse Thomas.

**WEARDE AND ST. GERMAN'S AMALGAMATED SLATE QUARRIES COMPANY (Limited).**—Capital 20,000l., in 2l. shares. This is a company established to acquire the lease of granite and other quarries in Cornwall. The promoters are Richard N. Collier, 83, Pall-mall; W. H. Beck, 129, Cannon-street; W. H. Millett, Louthville, near Lewes; W. G. Jarvis, Mount Tamar, near Plymouth; Richard Webb, 149, Peckham-park-road, Peckham; H. Fowler, 2, Aberdeen-village, Tottenham; and John Summers, 25, Cornhill-street, Piccadilly. Each of these takes one share in the company's capital.

**LYME-REGIS BLUE LIAS, CEMENT, AND HYDRAULIC LIME COMPANY (Limited).**—Capital 50,000l., in 2l. shares. This is a company formed to work quarries for blue lias, cement-stone, and to carry on business as cement, brick, and tile makers and dealers. The directors are W. S. Fitzwilliam, Mark Pluckerton, John F. Vesey Fitzgerald, G. S. Maitland, and Thomas Capon.

**COLORADO-CALIFORNIA GOLD AND SILVER MINING COMPANY (Limited).**—This company is projected to purchase and work the California Mine, situated near Central City, Gilpin county, Colorado. The capital is 50,000l., in 8000 shares of 10l. each, 1000 of which are to be issued to the vendors as fully paid up, in part payment of the purchase money. The subscribers are—Charles Reynolds, 9, Dowgate-hill, 50; James Fry, Gresham House, 50; F. Williams, 12, Forest-hill-road, Peckham-rye, 1; Edward Shepherd, 25, Denmark-grove, Barnsbury, 1; and James Clutterbuck, 12, St. Thomas-street, Islington, 1. The directors are the Hon. C. W. Wentworth Fitzwilliam, M.P.; Joseph Fry, Esq.; Charles Reynolds, Esq.; Philip Callan, Esq., M.P.; and Theodore Hikes Lowe, Esq.

## WATSON BROTHERS,

MINING AGENTS, STOCK AND SHARE DEALERS, &c.  
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

**SATURDAY.**—Active market for Carn Brea, at 142½ to 147½; South Carn Brea, 37s. 6d. to 42s. 6d.; Dolcoath, 180 to 185; Chontales, 2 to 2½; West Franches, 65 to 70; Utah, 17½ to 18; South Franches, 52½ to 55; and Devon Great Consols, 95 to 105. Roman Gravels, 19 to 19½; Grenville, 7 to 7½; Buller, 19 to 21; Prince of Wales, 17s. to 19s.

**MONDAY.**—Market brisk, Bullers advanced to 27½ buyers, and close very firm at 27½ to 32½. West Franches, West Chiverton, South Franches, Prince of Wales, Chontales, Carn Brea, Bog, Don Pedro, Eberhardt, Dolcoath, Cook's Kitchen, and Devon Great Consols in demand and firm at quotations. West Franches, 65 to 70; West Chiverton, 18 to 19; South Franches, 55 to 60; Prince of Wales, 19s. to 21s.; Chontales, 2 to 2½; Carn Brea, 142½ to 147½; Bog, 25s. to 27s.; Don Pedro, 35s. to 37s.; Dolcoath, 180 to 185; Gwydyr Park, 17s. 6d. to 22s. 6d.; 30 to 31; Devon Great Consols, 95 to 105; Gwydyr Park, 17s. 6d. to 22s. 6d.; South Condurow, 9s. to 10; Tankerville, 15 to 16; Tincroft, 49 to 51; West Tankerville, 17½ to 18; Kitty (St. Agnes), 10 to 10½; Uny, 8s. to 9; Pacific, 5 to 5½; Utah, 17½ to 18.

**TUESDAY.**—Market again very active, the principal dealing being in Dolcoath, Carn Brea, South Carn Brea, Buller, South Franches, West Franches, Prince of Wales, Great Vor, Cook's Kitchen, Chontales, Utah, and East Van. Tankerville shares advanced to 16, buyers. Dolcoath, 180 to 190; Carn Brea, 142½ to 147½; South Carn Brea, 37s. to 41s.; Buller, 27½ to 32½; South Franches, 55 to 60; West Franches, 65 to 70; Prince of Wales, 18s. to 20s.; Great Vor, 10 to 10½; Cook's Kitchen, 30 to 31; Chontales, 2 to 2½; Utah, 17 to 18; East Van, 12½ to 13½; Tankerville, 15 to 17; East Lovell, 12 to 13; East Seton, 23s. to 25s.; New Lovell, 2½ to 2¾; Pennerley, 3½ to 4½; Roman Gravels, 18½ to 19½; West Fraser, 4½ to 5; South Condurow, 9s. to 10; Eberhardt, 37½ to 38½; Neptune, 19s. to 21s.

**WEDNESDAY.**—Market moderately active for Tankerville, Utah, South Condurow, West Chiverton, Carn Brea, Dolcoath, Devon Great Consols, and New Lovell. Tankerville, 16 to 16½; Utah, 17 to 17½; South Condurow, 9s. to 10; West Chiverton, 18 to 19; Carn Brea, 142½ to 147½; Dolcoath, 185 to 190; Devon Great Consols, 97½ to 102½; New Lovell, 2½ to 2¾; Great Laxey, 16½ to 17; Great Vor, 9s. to 10½; North Roskear, 16½ to 17½; Roman Gravels, 19 to 19½; South Franches, 57 to 59; Buller, 30 to 32½.

**THURSDAY.**—Good demand for Dolcoath, East Lovell, New Lovell, Utah, Chontales, Cook's Kitchen, South Franches, West Franches, North Roskear, Eberhardt, and Don Pedro. Dolcoath, 185 to 190; East Lovell, 13½ to 14½; New Lovell, 2½ to 2¾; Utah, 17½ to 18½; Chontales, 2 to 2½; Cook's Kitchen, 30 to 31; South Franches, 55 to 60; West Franches, 67½ to 72½; North Roskear, 16½ to 17½; Eberhardt, 37 to 38; Don Pedro, 35 to 36; Grenville, 7 to 7½.

Van Consols, 25s. to 30s.; Roman Gravels, 19 to 20; Gwydyr Park, 17s. 6d. to 22s. 6d.

**FRIDAY.**—Active market for West Franches, South Franches, Kitty (St. Agnes), New Lovell, East Seton, South Condurow, North Roskear, Chontales, Utah, and Tankerville. Bullers weaker. West Franches, 70 to 75; South Franches, 56 to 58; Kitty (St. Agnes), 10 to 10½; New Lovell, 2½ to 2¾; East Seton, 25s. to 30s.; South Condurow, 10 to 10½; North Roskear, 17 to 18; Chontales, 2 to 2½; Utah, 17½ to 18½; Tankerville, 16 to 16½; Buller, 27½ to 30; West Chiverton, 17½ to 18½; Prince of Wales, 17s. to 19s.; Gwydyr Park, 17s. 6d. to 22s. 6d.; Bog, 25s. to 27½; Pennerley, 4 to 4½.

## THE FOREIGN MINING COMPANIES—No. I.

It is proposed under this head to give from time to time such information relative to foreign mining companies that, judging by the communications continually being received, would appear to be required on the part of investors. The main object in view will be to recount, in as concise a form as possible, the leading features, and also to afford data whereon an opinion may be based as to the merits of the respective enterprises. Necessarily most of the subject matter will be already known to the regular readers of the Journal, every item of intelligence being published from week to week; but as the register of members of these and kindred companies are ever changing, it is hoped that such a general outline may prove of value (if only in point of reference) to all associated with this daily increasing branch of mining industry.

There is now no less than 8,000,000l. to 10,000,000l. of English capital employed in the development of foreign mines—an amount considerably greater than at any previous period in the history of mining; and when it is remembered that in this aggregation of wealth there are directly interested no less than (say) 30,000 capitalists, and that during the past few months the capital subscribed, more especially in American mines, has been at the rate of something like 250,000l. per month, the great and growing importance of this channel for investment cannot easily be over-rated. These unmistakable evidences should show the utter futility of attempting by ill-advised statements, if not a positive distortion of facts, to stem a current which accredited statistics attest has proved highly remunerative, if only ordinary precautions are used. It is a fact, however inexplicable it may seem, that from the moment a leading contemporary, for some reason or other, obviously turned from its usual course to endeavour to divert the rapidly growing disposition to invest in American mine adventures, there has been readily subscribed an incomparably larger amount of English capital for that purpose than during any previously similar period. The "front of the offending" would seem to be the imprudence of the English capitalist acquiring mines simply upon the *ipsi dixit* of vendors; surely, those who put this forward as the reason (and none other of any cogency has yet been urged) will "be surprised to hear" that in only one solitary instance has this admittedly unreasonable and unbusiness-like policy been even mooted, when as was to be expected, it most signally failed, although the whole of the capital was subscribed immediately afterwards, and the subscribers possess a really valuable property. Another instance may be cited in which an American of large mining experience offered in the London market a mine in Nevada for 40,000l. The parties to whom it was introduced, who stand high in the mining world, engaged an expert from Wales to report as to the value of the property; but the report was so unequivocally discouraging that the negotiation for purchase fell through. Whereupon an influential party in San Francisco at once secured the mine, paying for it a very much larger sum than that at which it was offered in London; the result has been a realised net profit of no less than 113,000l. in the short space of thirteen months! Were it desired, many other similar cases could be quoted as showing by practical results that it is not so "absurd an idea" of a vendor offering an American mine for (say) three or four years' purchase, and simply because the capital so acquired can be refunded in the purchase of *bona fide* mining stock which can be obtained on the San Francisco Stock Exchange at an average of not more than one or two years' purchase.

Probably it is not generally known that the annual produce of gold and silver from the mines on the Pacific Coast approximates to \$80,000,000; and that although only little more than 20 years have elapsed since mining was commenced for these metals, during that time there has been extracted something over \$1,200,000,000, to say nothing of other forms of wealth.

## ATLANTA (NEW) SILVER MINING COMPANY.

CAPITAL 250,000l., IN 50,000 SHARES OF 5l. EACH.

This mine is situated in the Atlanta or Middle Boise mining district, Alturas county, in the territory of Idaho. The vein is of great fertility and power, exhibiting immense croppings, and being traceable by its outcrop for a distance of more than two miles. Like the Comstock, and most other masterly lodes, several company claims have been located upon it; the first taken up, and since most extensively developed, being that of the Atlanta Silver Mining Company, which covers the boldest croppings, and what appears to be the most opulent portions of the ledge. This company's claims, embracing 1600 linear feet of the lode, was taken up and properly secured under the laws of the district in 1865, since which time it has been worked with more remunerative results than any other mine in this portion of the territory.

The Atlanta lode has been described by an American authority as one of great magnitude and wealth, occupying an ore channel broad and deep, and marked by all the features and conditions of a true fissure. The vein matter has a thickness ranging from 25 to 65 ft. on the surface, increasing in volume steadily with depth; its thickness at the lowest point reached varying from 60 to 70 ft. The enclosing walls are granite, and everywhere lined with the clay and talc selvage, indicative of a true and persistent vein. The lode stands almost vertical, and the ores consist chiefly of an antimonial and arsenical silver blende, and ruby silver, mixed with which occurs a considerable percentage of native silver. The bulk of the ore is argentiferous, though some portions of the ledge carry a notable proportion of gold. Samples of virgin silver, weighing three or four pounds, are frequently met with in the Atlanta Mine, while those weighing several ounces are constantly encountered. Much of the ore is so concentrated and compact that masses weighing 400 and 500 lbs., and of extremely high grade, are often broken in different parts of the mine. These ores assay from a few hundreds to over \$26,000 per ton in silver, according to the degree of care used in selecting the samples tested. It may be said, however, in a general way, that the first-class ores assay from \$2000 to \$20,000 per ton; the second-class from \$200 to \$2000; the third-class running from \$40 to \$200 per ton. Along the line of the lode there are a number of rich chimneys or bonanzas, the heaviest and most valuable of which appear to be on the claims of the Atlanta Company. But while these chimneys occur largely in this mine the precious metals are so generally diffused throughout the vein matter that almost the entire contents between the walls of the lode may be accounted mal-leable ore.

As the company possess water-power of its own sufficient to drive at least 100 stamps, and as all testimony concurs in establishing that the mine has ample capacity to supply all the ore necessary to keep that number of stamps running, it is calculated from results already obtained that an annual revenue of \$2,635,700 might be realised by the employment of the company's entire motive-power in the reduction of ores of even the third-class grade. The lode is well situated for cheap and effective development, the precipitous sides of the mountain admitting of its being open to considerable depths by means of comparatively short tunnels. The mine being surrounded by a superior grazing country, and good agricultural districts, team stocks can be kept cheaply, and most of the staple articles of existence procured at moderate rates. With the aid of the railroad already made the mines can be reached in four days from San Francisco, and in seven from New York, the time formerly required to make these journeys being twenty and forty days respectively.

That the Atlanta Mine has not been more extensively developed is owing to the difficulty that has hitherto existed in obtaining capital for the purpose. For the same reason, the sale of the most sterling mine properties can be effected only at a great sacrifice on the part of the owners, nor can money be borrowed for the erection of machinery, and the development of even the best mines, except upon the most usurious terms, the rates of interest exacted on ca-

pital advanced for this purpose ranging from 30 to 60 per cent. per annum. The numerous demands arising for money in a new and growing country so completely absorb the local capital as to leave little for investment in mines, more especially such as are located in remote and sparsely settled districts. Therefore it is that mine-owners, who would effect sales or obtain assistance, seek countries where money is cheap, and where, while offering to capitalists the most liberal inducements, they are not themselves forced to submit to ruinous sacrifices.

Among the many favourable opinions expressed with regard to the value and producing capabilities of this mine may be mentioned that of Captain William Nancarrow, formerly the manager of the Battle Mountain Mine (now of Bog and Pennerley), who values the ore actually in sight at 600,000l., and states that "it is by far the best mine he has visited in the United States." With 50 stamps at work, the annual profit is estimated at over 135,000l.

Two competent English agents left a few days since for the mines, with the view of verifying the above valuations.

## Meetings of Mining Companies.

## GREAT WHEEL VOR UNITED MINING COMPANY.

The general meeting will be held on Thursday. The profit and loss account for the three months ending June is as follows:—

Black tin sold, May 24, and carriage	£1916 12 7
ditto June 20	2148 14 8
ditto July 23	2423 5 2
Tribute and royalty on tin sold from Roseladon, &c.	87 9 7
Half-year's rent of Trellisick mill to Midsummer, 1871	7 10 0
Sundries sold and cash balances	6 11 7 = £6590 3 7
Mine cost—April, May, June	£2621 19 11
Merchants' bills—April, May, and June (less discount)	1937 8 10
Lords' dues	275 0 10
Sundry payments—London expenses	2 0 7 0 = £6054 16 7
Balance (profit)	£ 535 7 0

The cash account made up to July 31 showed a cash balance of 5147 16s. 6d. The ground sunk and driven during the quarter was 34 fms. 4 ft. 6 in.

## NORTH AMERICAN GOLD MINING COMPANY.

A general meeting was held at the Terminus Hotel, Cannon-street, on Wednesday.—Mr. TORRENS, M.P., in the chair.

Mr. MAY (the secretary) read the notice convening the meeting.

The CHAIRMAN said the directors had thought it desirable to call the shareholders together, in order to submit a report which the directors had unanimously agreed to, the object of which he might in substance state to be this—to place before the shareholders the opinion of adopting that course most conducive to their interests. The directors were perfectly ready to acquiesce in whatever decision the shareholders might arrive at. The present condition of mining enterprise induced the directors to deem it desirable to be more than on the safe side, and consequently had taken no step to commit the shareholders in any way to the proposed enterprise. After the report of the directors had been read, their desire was to know whether the shareholders would wish to seek further information.

Mr. WIMSHURST suggested that the reports upon the mine should be read. The CHAIRMAN said it was the feeling of the directors that it would be a loss of time to go into discussions which the reading of those reports would give rise to. The two reports differed in points of detail, some of great importance, and others of very little consequence. Involving such a multiplicity of disputable points the directors preferred not taking upon themselves the responsibility of deciding, but rather to wait till the report of a third person could be obtained, as arbitrator between the two reports already obtained, then to print and circulate them among the shareholders.

Mr. COMYN wished to know the legal position of the shareholders at the present time, because a circular was sent round saying that the undertaking had been abandoned. The SOLICITOR said he had advised the board to rule that those shareholders who wished should have notified their intention to withdraw prior to this meeting.—Mr. COMYN protested against that view, for the circular distinctly stated that the company was going to be wound-up, and, therefore, he was of opinion it had ceased to exist as a company.

Mr. SHUTER (a director) said the board were quite ready to accept any resolution the meeting pleased to pass. The directors were as much committed as the shareholders; having taken upon themselves the responsibility of becoming trustees, they had convened this meeting to decide what course should be pursued. At present they were committed to 2s. 6d. per share, and he did not believe the shareholders would be called upon for anything more if it were decided not to purchase.

Mr. COMYN wished to know if in this question of the minority would be ruled by the majority? Mr. BARTHAUD (a director) understood the ruling of the solicitor to be that those shareholders who took part in this meeting would be held to their application as if no circular had been issued; and the matter was entirely in the hands of the shareholders as to whether they would go on or not. If the majority decided to go on they would, of course, govern the minority.

Mr. COMYN wished to know, if he now left the room, whether his responsibility would cease, because he did not wish to be held to a bond of that kind. The CHAIRMAN apprehended in all companies the minority must submit to be governed by the majority. There was a law upon the subject, which they could not possibly alter. The purpose of the circular was for the shareholders to decide for themselves whether they would close the matter or not, and they were now asked to elect.—Mr. Moss said when he subscribed his 2s. 6d. per share was for the purpose of investigating a mine; the investigation had taken place, and it was, at least, not conclusively satisfactory; there, he should think, the matter ended.

Mr. SHUTER said the board simply told them that the reports were conflicting, and not having sufficient time to go further into the matter, they had been obliged to relinquish the negotiations; and now they were asked whether they would agree to send out an expert from England to report upon the property, and thus afford means of judging between the two reports already received.

The CHAIRMAN said that most of the directors had taken more shares than their qualification. He might mention that Dr. De Grutt's report more than confirmed that of Mr. Morgan's; and Dr. De Grutt's was authenticated not only in Mr. Raymond's report, but also by Governor Stanford, the Governor of the province, who says that Dr. De Grutt is a man of influence and position. Dr. De Grutt was so sensitive about his report being questioned that he had suggested an Englishman being sent out to inspect the property; and the vendor was so satisfied as to the result that he had offered to pay for Dr. De Grutt's report if it was not confirmed.

After some further discussion, the report was received and adopted. The retiring directors were re-elected, and a vote of thanks to the Chairman and directors terminated the proceedings.

## GREAT WESTERN SILVER MINING COMPANY.

The first general meeting of shareholders was held at the offices, Moorgate-street, on Tuesday.

Capt. J. EVANS FREKE AYLMER in the chair.

Mr. J. H. THORNTON (the secretary) read the notice convening the meeting.

The report of the directors stated that not only has the transfer of the mine to the company been duly recorded and certified by the State Official in Hamilton, after due examination of the deeds by local authorities on the company's behalf, but that operations on the mine have commenced, and that the results already obtained are highly satisfactory. The representation of the company in Nevada, on matters connected with the taking possession of the property, was kindly undertaken by Mr. H. Nelson, one of the directors. Advice of the most favourable character have been received both from Mr. Nelson and Mr. Ellery. Bearing in mind the extraordinary results which are being obtained from the surrounding properties, the complete verification which has been made, so far as time would permit of the reports upon which the company was established, and the small amount of its capital, compared with similar undertakings, which will enable appreciable dividends to be declared from a comparatively small revenue, the directors feel they can fairly congratulate their brother shareholders upon the possession of a property of unusual promise, and upon the prospect of an early realisation of the best anticipations.

Mr. H. Nelson, in his letters as to the value of the property, states it would be impossible for the most experienced to make a statement which could be considered as trustworthy in the present undeveloped condition of the mine, but a few weeks or months at most will satisfactorily determine, and from appearances of surrounding mines he has every confidence that the result will be satisfactory.

Mr. G. B. Ellery, under date Aug. 2, states that everything appertaining to the company is progressing happily. An Atlantic cable message was received on Aug. 19, to the effect that "two shafts were working satisfactorily—bare next month. Congratulations."

The CHAIRMAN said the present meeting had been called in pursuance to the provisions of the Companies Act, which prescribed that at the first meeting of a company should be held within four months of registration. He had very little to add to the report which had been submitted, because the directors had taken care to embody every information they possessed. The company was registered on May 23, and the allotment of shares was made on June 6. The managing director, Mr. Nelson, who was a most able and working man, left for the mines on June 21, and the company received the property on July 21, and working was commenced on Aug. 2. Of course, they could scarcely expect much up to the present time, but they were satisfied they possessed an excellent property, and that in a short time when its development had progressed a little further, he had no doubt







## Mining Correspondence.

## BRITISH MINES.

**APPLETREWICK.**—J. Wiseman, Sept. 19: The 25 is worth 20 cwt. of ore per fathom; the stopes above, 20 cwt. of ore per fathom; the 25 west, just entering the ore-bearing ground, worth 5 cwt. of ore per fathom; the stopes east of No. 2 pump, worth 12 cwt. of ore per fathom; the 20 west, worth 18 cwt. of ore per fathom; the stopes, 18 cwt. of ore per fathom; the stopes in new vein, 12 cwt. of ore per fathom. The engine-shaft is set to sink 10 fms. deeper, and will be commenced immediately. In the VI. stage level we are rising, and expect to cut the flatting every day. The small engine for crushing is working well, 16 tons 12 cwt. of ore were dressed last week. Ore now on hand dressed, 62 tons; undressed, 124 tons; slag lead, 7 tons.

**BEDFORD UNITED.**—William Phillips, Sept. 21: We have considered it advantageous to continue our driving by the side of the lode during the past week, but shall take down the lode in the different levels, so as to report their size and character next week. The stopes throughout the mine are looking much the same as for some time past. The outward appearance of the lode in the 115 west is very promising.

**BLAEN CAELIAN.**—John Evans, Sept. 20: Engine-shaft: The 20 fm. level west is not looking quite so well this week; the lode is composed of blue slate, spar, with spots of lead ore, and a small branch of muddle. The 20 east is without alteration. The stopes over the 10 east continue to produce the usual quantities of lead ore—the first stope in this level is 15 cwt. and the second fully 2 tons of lead ore per fathom. The stopes in the back of the adit, east of shaft, are looking better; the average value of these two stopes is 1 ton per fathom. All other parts of the mine are much as usual. We have this day sampled 100 tons of lead ore, for sale on the 28th instant.

**BLUR HILLS.**—S. Bennetts, A. Gripe, Sept. 16: The 65 cross-cut, north of Leitch's shaft, is being pushed on through ground much the same as it has been. In the 65 east the lode continues to look very promising, and is producing good stones of tin, worth from 7l. to 8l. per fathom. On the same lode, in the 30 east, of Joy shaft, is poor. On the Wheal Betsey lode the 13 east, of Foulger shaft, is worth 5l. per fathom. A stope of this lode, computed 4th, 5th, and 6th, above, and 6th, below, in Joy shaft, below the adit, the same lode is worth from 15l. to 20l. per fathom. The various pitches throughout the mine are in the aggregate not quite so productive as they have been.

**BOG.**—W. Nancarrow, J. Lenn, Sept. 20: The engine-shaft has been cleared to the bottom of the 80 fathom level, and we are very glad to state we have the shaft clear from this point to the 100, having found a line 21 fathoms, and we have every reason to believe it will be found in good condition down to that level. We have yet a few sets of timber to put in to make the shaft secure to the 80, and as soon as this is done we shall have the water low enough to enable us to fix our standing ground lift. We have also cleared out the 80 fm. level pit, and got into some of the levels, but could not explore them far, in consequence of their being full of debris, the greater part of which will well pay for cleaning, as it contains a good quantity of lead and blende. As soon as we possibly can we shall clear out these levels, in order to open out tribute pitches.

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ing on the soft copper lode have just hoisted into the yellow copper or great lode. We shall now proceed to stope on the yellow copper, which is of good quality; the soft lode, on which many hundred tons have been exposed to view, may be reserved until a favourable market shall open for ores of this class.—The 55: Since last report we stopped pumping, in order to clean out our boilers and flues, the work in the 55 was consequently suspended.—Kilmacoo Silver Blende Ore: Operations are going on at this point satisfactorily. The cargo of ore is complete, and lying in Wicklow.

**CHRYSLER AND WHEAL ABRAM UNITED.**—Wm. Kitto, W. J. Paul, Sept. 16: Sturt's Engine-shaft: The 101 fm. level is fixed in its place, and we are engaged in sending down the rods and putting in stays, &c., which will be complete in another week. In the 205 east west the lode is 1½ ft. wide, and worth from 10l. to 12l. per fathom.—Crenner Shaft: In the 130 east east the lode is the same as when last advised, producing saving work to dress. In the rise in the back of the 130 fm. level the lode is 2 ft. wide, and worth from 8l. to 10l. per fathom for tin and copper ore. In St. George's shaft, sinking below the 130 fm. level, the lode is 2 ft. wide, producing good stones of copper ore. In the 190 east west the lode is 3 feet wide, producing saving work to dress, having a kindly appearance. Folly's engine-shaft, sinking below the 130 fm. level, the lode is 2 feet wide, and worth for tin and copper from 10l. to 12l. per fathom, for the length of shaft (12 feet). There is no change in any other part of these mines to report. We shall sample next Tuesday 300 tons of copper ore, of good average quality.

**CWM LERY.**—J. Trevelan, Sept. 14: In driving on the caunter lode, in a south-eastern direction, we have cut through two east and west lodes, but from their 1 am of opinion they will fall in together going east, and at no great distance, and form a deposit of ore. I should have driven at once and proved this had I not been for the immense quantity of water oozing out of the rock on the south side of the southernmost lode, leading me to think there must be lodes still further south. I am anxious to prove this before we sink the surface shaft. The character of the two east and west lodes is quite cheering, their average width being 4 feet, containing excellent lead ore.

**CWM VRON.**—J. Kitto, Sept. 14: I have nothing new to report from the engine-shaft; the sinking is progressing favourably, but being in the soft part of the lode we cannot expect any improvement until we reach the 48, where we shall again cut through the producing part. We are making good progress in the 36, driving west towards the ore ground, and judging from present appearance, the lode is of good quality, and will produce a good quantity of ore. The sinking of the 36 is progressing favourably, but being in the soft part of the lode we cannot expect any improvement until we reach the 48, where we shall again cut through the producing part. We are making good progress in the 36, driving west towards the ore ground, and judging from present appearance, the lode is of good quality, and will produce a good quantity of ore.

**DOLEWEN.**—David Sept. 13: The adit level is set to six men, at 110s. per fathom; the end is very wet, and from its general appearance, and a joint coming in on the south side, I am daily expecting a further improvement. **DRAKE WALLS.**—T. Gregory, Sept. 20: The branches in the 60 fathom level west are of the same value as reported last week. In the 65 fm. level west the branches are improving as we open on the course of the same. In the 30 fathom level south some good veins of tin are being met with, and as we get away from the cross-course we expect an improvement. The branches in the 80 fm. level east are worth 8l. per fathom for copper, with occasional stones of tin. We have not yet reached the bottom of this level.

**EAST BOTTLE HILL.**—J. Eddy, Sept. 21: South Cross-cut: We are driving by four men, at 40l. per fathom, and continue to cut through branches carrying tin, dipping south towards the lode 5 ft. in a fathom.—New Shaft: The new shaft, sinking on Bottle Hill main lode, is still dry, consequently the men are making good progress, having sunk 6 ft. this week.—North Tin Lode: The lode in the shallow adit level, east of air shaft, is about the same as to size and quality as when last reported on. We have driven through a very good lode for 14 fms., and is still going in the end. In the 20 east the lode is larger and richer for tin, but in the 40 east the lode is smaller and poorer. We are driving the deep adit level, which is easy for working and improved in quality, and in 6 fms. further driving east we shall get under the rich run of ground gone down in the level above.

**EAST CARADON.**—John Truscott, Sept. 20: The 130 cross-cut south is in hard elvan. The 115 cross-cut south, ground granite, and favourable for driving. The 115 east, on south part of caunter, the lode producing saving work. In the 70 cross-cut south we have intersected the south part of Child's lode, which is 1 foot wide, composed of quartz and pebble, intermixed with muddle and blende, and is worth 10l. per fathom. The 70 east, on south part of caunter, the lode producing saving work. In the 70 cross-cut south we have intersected the south part of Child's lode, which is 1 foot wide, composed of quartz and pebble, intermixed with muddle and blende, and is worth 10l. per fathom.

**EAST DOLWEN.**—J. Davis, Sept. 13: No change here of importance. I expect the lode in the 100 east, the men have not yet completed. Their last bargain of 5 fms., which will make this cross-cut adit 35 fms. long. **EAST PLYNIMON.**—J. Paul, Sept. 21: No further lode or branch has been met in the deep adit cross-cut north (now driven 160 fathoms). The level is now being pushed on northward, by six men, in favourable ground for driving through.

**EAST RHYDALLOG.**—James Dunkin, Sept. 20: There is no alteration in either of the levels in 1 m. since last week.

**EAST SETON.**—Joseph Vivian and Son, Henry Arthur, Sept. 21: There is no alteration in any part of the mine worthy of particular comment since last week's report.

**EAST TERRAS.**—James Harris-James, Sept. 20: The new lode is rich in tin, being worth over 2 cwt. of that ore to the ton of tin stuff; but it is now small, owing to the hard rib coming in from the north and thereby squeezing it. Capt. Pope, of Redruth, was here yesterday, and went over the mine; he thinks very highly of the property.

**EAST VAN.**—W. Williams, Sept. 14: The engine-shaft is sunk to the depth of 16 fms. 2 ft. The cross-cut south to the shaft is driven 8 fms. 4 ft.; they have cut 2 ft. to reach the shaft. The cross-cut north, at the present end, is driven 1 fms. 5 ft. and is now in the lode, which shows faces of lead, but is not sufficient to value. The indications to this depth are a sufficient guarantee of good results at deeper levels. The masons are now building bob-bits and blocks of engine-house.

**EAST WHEAL BASSET.**—John Lean, Sept. 21: The ground in the 130 cross-cut towards the tin lode is a little easier for driving, but still in the elvans. The men belonging to the 110, west of Hodges's cross-cut, are cutting into the north wall; water issuing from it freely; it is thought the north lode is close at hand. There is but little alteration to remark upon elsewhere.

**EAST WHEAL GRENVILLE.**—G. R. Odgers, Wm. Bennetts, Sept. 16: The lode in the stope at the 75, west from engine-shaft, has again improved to 20l. per fathom for tin. All the other places in this mine are of the same value as we stated on Wednesday.

**EAST WHEAL GRENVILLE.**—G. R. Odgers, Wm. Bennetts, Sept. 19: In the 120 fm. level cross-cut, driving north, we find small branches of black ore crossing the end, but we have not yet met with a lode. The lode in the 95 east is 1½ ft. wide, and worth 10l. per fathom. The lode in the 75 east is 1½ ft. wide, and worth 10l. per fathom. The lode in the 75 east is 1½ ft. wide, and worth 10l. per fathom.

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*[Faint handwritten notes at the bottom of the page]*

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reached in about a fortnight. Another important point is a cross cut in the 24 to intersect the north lode, which is supposed to be about 13 fathoms north of the main lode. The former company drove the cross-cut 4 fathoms, and then abandoned it, although their own and other independent agents strongly advised its continuance. This cross-cut the present company intend to resume as soon as possible. That the late company sold a large quantity of tin and copper from a comparatively small portion of ground worked away there is not the slightest doubt, and if the present adventurers find the 50 half as good as they are led to expect they will be making good returns of tin, whilst important discoveries may soon be made in other parts of the mine, there being such a large extent of ground laid open.

**TANKERVILLE.**—Capt. Waters, the manager, writing after the visit of two of the directors to the mine this week, says—"They never saw richer stuff brought out of the mine than what came out yesterday, and we have never had such a day's winding of ore out of the mine as that brought out of the bottom of Watson's shaft, below the 110, to-day. There is a cavity there such as we have never seen before, and a rock of lead, in a separate piece, many tons weight. The great lode is a sight worth looking at, and no mistake." Owing to the lamented death of a large shareholder, whose shares, it was thought, would be offered for sale, the market price has been lower during the week; but, while it will be seen that the mine itself looks quite as grand as ever, we are informed that the shares referred to are not likely to be realised.

**WHEAL BULLER.**—This hitherto remunerative mine, which in years past commanded a market value of 1300l. per share, having upon an expenditure of 5l. per 1-64th share divided a net profit of no less than 243,392l., is again making steady and progressive strides towards being ranked with such properties as Carn Brea, Cook's Kitchen, Dolcoath, East Pool, and Tincroft; and, resembling these great mines, it is found that in depth copper is being replaced by large deposits of tin.

**EAST TERRAS (Tin).**—Lately this important property has been inspected by various mining capitalists of known ability and experience, and they all concur in the opinion that the Terras and Parky lodes traverse the entire out, and are rich up to the very surface; not only this, but they specially note that the proceedings hitherto adopted for their development have been judicious and economical. The works will now be pushed forward with additional vigour. The inspections have been ordered entirely by strangers, and in no case by the directors or their friends. The demand for shares has much increased.

**THE CASTLE GATE MINE** is opening up in a very satisfactory manner; several lodes of great promise have been interested in the adit, and the prospects are very cheering for the shareholders. This district is likely before long to become a very favourite one for the investment of money in the mines. The shares in the Castle Gate are selling at 1 to 1½ par.

We observe that the 100l. shares of the **CARNFORTH HEMATITE IRON COMPANY** (Limited), which was established some few years since by Messrs. H. J. Walduck and Co., of Manchester, are at 100l. premium per share, several transactions having taken place at this figure. The company's last dividend was at the rate of 20 per cent. per annum.

**WEST TOLGUS.**—After long perseverance and a heavy outlay the shareholder this mine have reason to congratulate themselves on the recent improvements at several important points, especially in the bottom levels, which continue to open out well, and are valued at 15 tons of ore per fathom, making a produce of full 9 per cent. The sampling this week for two months amounts to 504 tons, leaving out a very considerable quantity on the floors not yet dressed.

**RICHMUND CONSOLIDATED.**—The following telegram was received on Sept. 21:—"Bullion produced in the last 20 days, one furnace, £43,000." This is at the rate of over 12,000l. gross per month for one furnace, and for the three which will soon be in operation 36,000l., one-half of which will be net profit. Upon this basis the net annual yield will be 216,000l.

**CHONTALES.**—The highly favourable news received from these mines by the last mail induces us to reproduce the article we published at the beginning of July last, together with the latest information:—

"CHONTALES.—The re-organisation of the company has enabled the directors to obtain capital for working the mines properly. With regard to the San Benito West, Mr. Belt says:—"The opening out this mine was one of the objects to be accomplished with the new capital, but we have had the good fortune to do it out of the profits, and we estimate that this mine is now capable of yielding 400 tons of additional quartz monthly. San Benito East is another mine which he says 'has been entirely opened out of the profits, and it is a grand addition to our resources. We are busy making a branch tramway from the San Benito West tramway, and when completed we shall be able to send down 1500 tons of ore per month, or even more if required.' At San Sebastian they are driving a level on the lode, and Mr. Belt believes if the works here are prosecuted 'we shall have a good mine in less than a year.' At San Pablo and Consuelo the operations have been re-commenced. The 12 heads of stamps are reported to be working well, and Mr. Belt says, 'We have got the standard of the revolving ones up, and the shaft fixed, and expect to announce next mail that they are finished.' This is another work being done out of profits. It is expected that by this time the number of stamps in operation is doubled (24), and from steps already taken it is believed they will be further increased to 48 in five to six months hence. As each 12 heads can stamp 1200 tons of ore per month, 48 should stamp 4800 tons; and, assuming the average yield to be equal to the last (rather above ½ oz. per ton), it would give fully 2400 ozs., which, at 3l. per oz., would be 7200l. The costs lately have been about 1200l. per month; but, supposing them increased to 2000l., it would leave £5200l. profit per month, or at the rate of 62,400l. per annum, or nearly 12l. per share. It must be borne in mind that these are our estimates, and that the average yield may not be so high; still they are founded on fair and reasonable data, and by simply extending the late scale of working in proportion to the power and efficiency of the machinery to be used. We must also add that as more of the company's mines come into full working order still larger quantities of quartz may be treated. The capital of the company is now only 136,000l., without any debts or liabilities, but including a sum available for developing the mines and for machinery of about 15,000l. If Chontales were a new undertaking, never heard of in this country before, the shares would be at quite as high a premium as those of the new American companies at present being introduced to the public, and certainly with at least quite as much to justify it."

The above appeared in the Journal nearly three months ago, and it is very satisfactory to find our anticipations are being so forcibly realised, as shown in the following advices by the late mail:—

"CHONTALES (Nicaragua).—Mr. Belt, August 5: In opening out upon the lode at San Benito East we have cut some of the richest ore that has ever been seen at these mines. The discovery is near the top of the lode, and no doubt, is exceedingly rich; and it has further to be said in its favour that it has not been interfered with by the natives. In the last 6 feet driving the lode for 7 feet in width (which is the width of the level) has been worth 3 ozs. per ton, and yesterday Captain Evans reported the end to be worth 5 ozs. to the ton. How far it will continue no one can guess. The independent of the rich leader (which will yield 100 ozs. of gold to the ton), we have had a large and profitable lode, which for ¾ mile is almost unexplored. I consider this mine promises to turn out a great prize. At present very little of this rich ore has been taken to the stamps, and our returns for this month have been further diminished by a run of ground having occurred in San Antonio Mine, which cut us off from ore and gave a short supply to the stamps. At the same time we had to take up and re-lay a considerable portion of the San Benito West tramway, but I am happy to say that the San Antonio Mine has considerably improved, and is again in working order. The twelve new revolving stamps are erected, and work admirably. I am glad that you are sending out 24 more heads, together with an engine-wright, to erect them and the second steam-engine. We have also had very severe weather, which has greatly impeded our general works; but, notwithstanding these hindrances we have sent to the stamps 416 tons of ore, which yielded 217 ozs. of gold, value £3005, or 601l. The working and general cost for the month has been £3447, or 691l., showing a loss of 881l., to which must be added expenditure on new tramway at San Benito East, 8917, or 1831l. Taking into consideration the serious drawbacks referred to, and the great discovery of rich ore made at San Benito East, the month's operations must be considered satisfactory. The medical officer reports the health of the establishment to be good."

The following appeared in our City Article last week:—"Chontales shares have been largely dealt in, and leave off at ¼ prem.—that is, shares 1½ paid, 1 to 1½; 2½ paid, 2 to 2½. The advices, which will be found in another column, report a discovery which may lead to very important results. It will be remembered by many of our readers that at the Consuelo Mine a few years ago there was a rich 'nail,' or leader of gold, from which the native miners had obtained gold to the value of some hundreds of thousands of pounds, and that from this 'nail' in the pillars or supports to the native workings the present company obtained altogether something like 40,000l. worth of gold. The shares rose to 6l. per share. Unfortunately, however, the pillars were all that remained rich in Consuelo, and the supply ceased. But it would now appear from Mr. Belt's reports that a continuation of this rich deposit has been met with in San Benito all in whole, or virgin, ground; and when the mail left the lode for the width of the level, 7 ft., was worth 5 ozs. of gold to the ton, with a rich 'nail' or leader running through it worth 100 ozs. per ton. The next advices (which are due about Oct. 12) should give some extraordinary results, and they will be looked forward to with the greatest interest by the shareholders."

It may be added that there are 68,000 shares, of 2l. each, of which 53,000 are fully paid, and 15,000 have 1l. called up.

**EBERHARDT.**—It is understood that a most satisfactory detailed report has been received. The present stamping power, it is calculated (with ore of only the ordinary grade) will yield an annual profit of over 200,000l. Some important information is embodied in a letter which appears in another column.

**ENTERTAINMENT TO CAPT. THOMAS TRELOAR.**—It will be seen by reference to another column that an entertainment was given to Capt. Treloar prior to his leaving Brazil, as a recognition of the success achieved in the development of the Don Pedro Mine, and the satisfactory manner in which he had conducted the several enterprises under his care.

\* \* With this week's Journal a SUPPLEMENTARY SHEET is given, which contains—Original Correspondence: Explosions of Gas at Collieries, No. 1; Patent "Protector" Colliery Lamp (T. Harrison); Coal Cutting Machinery (J. Rothery, S. Fifth); Our Coal Supply; Boring by Machinery (Wm. Wasley); Mining in California (F. T. Haggard); Comstock Mines, Nevada (H. H. Roche); American Mines on the Pacific Coast, and the Mining Bureau of California (H. H. Roche); On Irish and Foreign Mines—Paddy McCarthy and his Landlord; Mining in the Pacific States; Undeveloped Mining Districts (W. Brenton); East Lancashire Silver-Lead Mine; Chilverton Moor, and its Management; Terra; Tin Mining Company (Wm. Marlborough and Co.); Mining in Cardiganshire—Excursions of the Iron and Steel Institute—Manufacturing Industry of Scotland—Engineering Trades of Glasgow—Foreign Mining and Metallurgy—Foreign Mine Reports, &c.

## The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, SEPT. 22, 1871.

COPPER.		£	s.	d.	£	s.	d.
Best selected . . . . .	78	0	0	0			
Tough cake and tile . . . . .	76	0	0	77	0	0	0
Sheathing & sheets . . . . .	77	0	0	80	0	0	0
Boils . . . . .	79	0	0	80	0	0	0
Bottoms . . . . .	81	0	0	83	0	0	0
Old . . . . .	60	0	0	—			
Burra Burra . . . . .	77	0	0	—			
Wire . . . . .	0	0	9½-10d.				
Tubes . . . . .	0	0	9½-10½d.				
BRASS.							
Sheets . . . . .		Per lb.					
Wire . . . . .		8d. —					
Tubes . . . . .		8d. —16½d.					
Yellow Metal Sheathing . . . . .		6½d. —7½d.					
Sheets . . . . .		6½d. —7d.					
SPELTHER.							
Foreign on the spot £18 5 0 — 18 10 0							
to arrive . . . . .	18	5	0 —				
ZINC.							
In sheets . . . . .	24	10	0 —				
QUICKSILVER (p. bot.) £10 15 0 — Nom.							
TIN.							
English blocks . . . . .	£136	0	0 —137 0	0			
Do, bars (in brls.) . . . . .	137	0	0 —138 0	0			
Do, refined . . . . .	140	0	0 —				
Banca . . . . .	135	0	0 —136 0	0			
Straits . . . . .	131	0	0 —132 0	0			
TIN-PLATES.*							
IC Chitto, 1st qua. t . . . . .	1	6	— 1 10	6			
IC Ditto, 1st quality . . . . .	1	6	— 1 17	6			
IC Ditto, 2d quality . . . . .	1	7	— 1 8	0			
IC Ditto, 3d quality . . . . .	1	13	— 6 14	0			
IC Coke . . . . .	1	5	— 1 7	0			
IC Ditto . . . . .	1	11	— 1 13	0			
Canadaplates, p. ton, 13 10 — 15 0							
Ditto, at works . . . . .	18	10	— 14 0	0			
IRON.							
Bars Welsh, in London . . . . .	8	0	0 — 8 10	0			
Ditto, to arrive . . . . .	7	17	6 — 8 0	0			
Nail rods . . . . .	8	0	0 —				
Staf. in London . . . . .	15	0	0 — 9 0	0			
Bars . . . . .	15	0	0 — 9 2	6			
Hoops . . . . .	12	10	6 — 10 0	0			
Bars . . . . .	8	0	0 —				
Hoops . . . . .	8	15	0 —				
Sheets, single . . . . .	10	0	0 —				
Fig No. 1, in Wales . . . . .	4	10	0 — 5 10	0			
Refined metal, ditto . . . . .	4	10	0 — 5 10	0			
Bars, common ditto . . . . .	7	0	0 — 7 2	6			
Do, mch. Tynor Tees . . . . .	7	15	0 — 8 0	0			
Do, railway, in Wales . . . . .	7	0	0 — 7 15	0			
Do, Swed. in London . . . . .	5	10	0 — 10 10	0			
To arrive . . . . .	10	0	0 — 10 5	0			
Fig. No. 1, in Clyde . . . . .	3	3	0 — 3 10	0			
Do, f.o.b. Tynor Tees . . . . .	2	9	—				
Do, Nos. 3, 4, f.o.b. do. . . . .	2	6	— 2 7	0			
Railway chairs . . . . .	5	17	0 — 6 0	0			
spikes . . . . .	0	11	0 — 0 12	0			
Indian Charcoal Pigs,							
in London, p. ton. . . . .	5	0	0 — 6 10	0			
STEEL.							
Swed., in kegs (rolled) . . . . .	12	5	0 — 13 0	0			
Do, (hammered) . . . . .	13	0	0 — 14 0	0			
Ditto, in faggots . . . . .	15	0	0 — 16 0	0			
English, spring . . . . .	17	0	0 — 23	0			
LEAD.							
English Pig, com. . . . .	18	0	0 —				
Ditto, L.B. . . . .	2	6	18 5 0				
Ditto, W.B. . . . .	Nominal.						
Ditto, sheet . . . . .	18	10	0 —				
Ditto, red lead . . . . .	20	10	0 —				
Ditto, white . . . . .	28	0	0 — 30	0			
Ditto, patent shot . . . . .	20	5	—				
Ditto, Spanish . . . . .	17	10	0 —				

REMARKS.—What a contrast there is in the state of the metal trade compared with this period last year. In the Money Article of the Times of Sept. 7, 1870, it commences, "At no period during the present generation has there been a suspension of general business more complete than at the present moment." Then all the evils of war were rife; now the blessings of peace prevail. Happily the sword has been sheathed, and the sickle brought out. The harvest has been gathered, and peace, plenty, and happiness secured. Then nothing but depression and declining prices, now a cheerful feeling and advancing markets. Then nobody would spend any money, now everybody is ready to buy freely. Then there was doubt and anxiety depicted on the countenances of men; now confidence is restored, credit re-established, and men's minds at ease, and if no horrid catastrophe again overtakes us what a brilliant prospect lies before us. As war promotes the ruin and misery of nations, so, in like measure, does peace promote happiness and prosperity. War stops trade, peace increases it. Civilisation advances, improvements and inventions are brought forth, and industry is rewarded. Employment is easily obtained, and good wages commanded. The markets recover, and the value of general merchandise increases. It needs but a reference to our markets lately for a corroboration. Business is in a most healthy condition; prices are not in any way inflated by speculation, but are well supported by the requirements of consumers and shippers. The time really seems to have arrived, and completely turned round in favour of sellers, and the question in future is not likely to be so much that of price as the time of delivery; buyers will, in fact, have to submit to sellers' terms, instead of dictating their own, as for some time past; orders may be expected to flow in with greater regularity, and be much larger, as well as more numerous. As regards prices, with the exception of slight fluctuations, which are rather to be desired than otherwise, there will probably be upward markets for a considerable time. Each day business becomes more extensive and flourishing; the tone, the feeling, and general appearance of things are more sprightly, exceedingly encouraging, and very satisfactory. If the improvement continues, and there is every reason to expect that it will do so, the close of the year promises to greatly eclipse its predecessor, and confirm our anticipations in every respect. Buyers should not on any account delay buying, as prices cannot be relied upon, even for a day. The markets are in a sensitive condition, and if speculation begins it is impossible to foresee the ultimate.

**COPPER.**—A steady rise is going on; the movement, however, at present is devoid of excitement, being neither rapid or sudden, but gradually, step by step, it reaches a higher point. This is, perhaps, the best way it could proceed, because it is the safest and most permanent, and gives the market daily additional strength, and more effectually establishes the position of prices. There is no fear of a relapse from the realisation of second-hand parcels, for the best of all reasons, that the quantity so disposed is too limited to produce the least effect. By far the greater number of importers possess the ability to hold, and there is not wanting the manifest disposition to do so until prices attain a more remunerative figure. Steadiness is always a guarantee of stability, and such has been the case with the market for some time past; prices have shown but little variation, and more recently the fluctuations have been in an upward direction. In taking a retrospective glance of former years it will be found that the market has been in a state of depression during the summer months; it has now passed away, and although the demand has been quiet and prices at times slightly wavering, yet the market, on the whole, has been tolerably upheld, and sellers have now the satisfaction of reaping the benefit of the firmness they have collectively displayed. The demand is increasing, not spasmodically but steadily; the business transacted is purely of a bona fide character and far from speculative. The smelters made no alteration in their fixed rates on Monday, although some now decline accepting further orders without an advance, as to selling cheaper, the smelters are quite incapable of doing so while the raw material advanced. Nothing under 14 to 14½ per cent. can be bought. Chili bars continue to improve, and are quoted 68l. to 69l. 10s. Sales of tough have also been effected in some instances at 77l. for extended delivery, and 78l. since asked. The enquiries for India sheets are mostly limited a little below current rates, but as the telegraph will quietly announce the rise that has set in here, it will probably not be long before the limits are increased. This must be done, as copper will be wanted, owing to the short shipments to the East both this year and last. The advices from India in the market reports are favourable. In Calcutta "Manufactured" has been in rather better demand, and is slightly higher. Yellow metal sheathing is active. In Bombay "Copper braziers are firm." In Kurrachee "Copper is asked for." Several Russian sheet orders have been placed, and there are enquiries from the Levant for both sheets and bottoms. Yellow metal is in particularly good demand; nothing can be obtained at 6½d. for 4 x 4 sheets, and very little under 6½d. Contracts already made at 6½d. per lb.

**IRON.**—Owing to the advance in Staffordshire iron the Welsh ironmasters have raised their prices for rails as well as for bars. Light rails are in very good demand, and sellers ask 7l. 15s. to 8l., f.o.b. at Wales. Merchant bars stand at 7l. 2s. 6d. at the works; the price from stock in London is again higher, sellers quoting 8l. to 8l. 10s. Staffordshire descriptions still continue in good demand, and the leading houses will only accept orders subject to prices to be fixed next quarter-day. Some firms, however, are looking at 9l. for bars, 9l. 12s. 6d. for hoops, and 10l. 10s. for sheets and plates, delivered in London. The market is very firm, and even at the above rates makers do not like engaging deeply, especially when any fixed date for delivery is stipulated. The wages question seems to have been satisfactorily arranged, and there is no doubt the men will work contentedly under the modified scale. It is a pity the masters are always so dilatory in acknowledging the men's services, and to show a proper appreciation of the men's worth. The rise in wages should emanate from the masters, and not leave it to the men to approach the subject. If the masters wish to cultivate a good feeling, and even to steady their own interests, it would be surely better to demonstrate to the men the advisability of co-operating together, and not acting antagonistic to one another. It is evident from the fact of the masters complying with the present request that they are necessitated to do so, or that the prices they are obtaining will afford it; but whichever may be the case, a little consideration of the consequences, and making a move in the matter themselves in good time, might have prevented the manifestation of power on the part of the men. It is now clear enough the masters are almost entirely in the hands of the men. The masters may know this well enough; at the same time it is foolish, to say the least, to give the men an opportunity of displaying their power. This is the old question repeated over and over again—capital against labour, the one opposing the other, instead of working together to mutual advantage. If the masters continue to work in this arbitrary manner towards the men, and take no other interest in advancing their interest from time to time, what other conduct can they expect from the men than that they will, whenever they desire it, at a convenient time, declare for an advance in the rate of wages, and strike as soon as they can get the point? There are occasions when such an event would prove ruinous to the masters, and being aware of this they ought to endeavour to place the men on the best footing, so as not to give them grounds for complaint. There is no occasion for the one to be subservient to the other, their interests are identical, and a spirit

of unanimity ought to pervade both sides. It is strange indeed if the men can always see when the market will bear an advance to cover a rise in wages, and the masters are so dull that they cannot realise equally as quick; in fact, the masters have more advantages than the men, and if they took the trouble, or rather took to heart the men's welfare, and to meet the men oftener, and maintain acquainted personally with the state of trade, for really there need be no secrets in business if conducted honestly and straightforwardly, a plain unvarnished statement of the prices of the raw material and the prices obtained for the manufactured article made known to the men every month or two, and the wages adjusted accordingly, would so win them over to their masters that we should never hear of strikes in the iron districts, or elsewhere, if the plan were adopted. In Swedish bars there is a good enquiry, and higher prices quoted from stock most of the holders quote 10l. 10s., but for arrival and ex ship 5s. 10s. would be taken. The price in Sweden is much higher, and the iron could not be replaced here at anything approaching current rate; there is, consequently, every probability that the price will be firmly maintained. Shipments of Scotch pigs continuing favourable the market again improved to 6l. 6d. cash, since which, owing partly to the advance in the Bank rate, the price dropped to 6l. 7½d. cash. With increasing tightness in the money market speculation is likely to be checked, and prices will depend chiefly upon the demand for shipment, which, however, are not likely to be affected by a rise of 1 per cent. in the Bank rate to any material extent.

SHIPMENTS.—Week ending Sept. 16, 1871. . . . . 21,465 tons  
Week ending Sept. 17, 1871. . . . . 10,651 "

Increase . . . . . 10,814 "

Total increase since Dec. 25, 1870 . . . . . 144,016 "

LEAD.—There is no change to note in the value of this metal; the demand is steady, and stocks are not excessive.

**SPELTHER.**—Silesian is still quoted about 18l. 5s., but special brands have realised 10s. per ton higher. Hard has been sold at 14l. Favourite brands are quoted about 15s. per ton extra.

**TIN.**—The sale of 300 tons of Straits by public tender, on the 20th inst., resulted in about 30 tons for arrival realising 131l. 15s., 200 tons on the spot at 131l., and 70 tons at 130l. 10s. This sale was well planned, for it stole a march upon the Dutchmen, and compelled them to throw in their support for the sake of their forthcoming sale of 2500 tons of Banca on the 29th inst. If the sale of the 300 tons of Straits had been allowed to go off badly it would naturally have considerably influenced the Banca sale, and as it is not likely to help it much, for if 131l. had to be accepted for the greater portion of the 300 tons, so much larger quantity as 2500 tons should sell proportionately cheaper. The increase in the Bank rate, and increasing tightness of money on the Continent, will, to some extent, prejudice the sale. Sales in Holland, ex the sale, have been effected at 78½l., sellers asking 79l. The offers from France will probably be limited, as business seems to have fallen off again there, and very slowly recovering.

**TIN-PLATES.**—Makers have not deviated from previous quotations, and report full order books.

**STEEL.**—No change; market for foreign dull.

**QUICKSILVER.**—Sellers generally decline to name any price, and the only way in which it can be procured is by leaving orders in the hands of sellers, and giving them power to charge their own price, but one fair transaction has taken place during the week at 10l. 10s.

**COPPER.**—Messrs. J. Pitcairn-Campbell and Co. (Liverpool).—Our report this fortnight contrasts very favourably with the three preceding ones, this month having set in with a much improved demand for all sorts of copper. The Continent has taken pretty freely both of Chili and Australian, and the English smelters have seen their way to buy fair quantities of ores and regulus. Quotations are 67l. 10s. to 69l. for Chili bars according to brands; 14s. for good ore and regulus; 74l. to 76l. for Chili ingots; and 15s. for Corocoro barilla. Business transacted here at Swansea since our last comprises about 1864 tons bars at 66l. 10s. to 69l. per ton; 4478 tons ores and regulus, at 13s. 9d. to 14s. per unit; 25 tons barilla, at 15s. per unit; and 235 tons ingots, at 73l. 15s. to 76l. per ton. At the Swansea sale, 1864 tons ore, average produce 16 per cent., average price 13s. 9d. per unit. Arrivals here during the fortnight of West Coast, S.A. produce—John Elder, from Valparaiso, 111 tons regulus, 20 tons barilla, agellan, from Valparaiso, 200 tons bars, 300 tons ingots, 100 tons barilla, at Swansea, Alline, from Caldera, 733 tons regulus; Cubana, from Carrizal, 680 tons regulus. Stocks of copper (Chilian and Bolivian) in first and second hands, likely to be available, are—

Ores.	Regulus.	Bars.	Ingots.	Barilla.
Liverpool . . . . .	798 . . . . .	1515 . . . . .	8,920 . . . . .	1223 . . . . .
Swansea . . . . .	285 . . . . .	3751 . . . . .	3,456 . . . . .	167 . . . . .

Total . . . . . 2663 . . . . . 5306 . . . . . 12,378 . . . . . 1390 . . . . . 471

Representing about 17,200 tons fine copper, against 21,500 tons fine copper, Sept. 15, 1870; 16,100 tons Sept. 15, 1869; 8900 tons Sept. 15, 1868.

Messrs. James and Shakspeare.—In furnace stuff about 550 tons of regulus, to arrive at Swansea, have been sold at 14s. per unit, under which figure there seems to be nothing obtainable. Chili bars are in about the same position as when last quoted, the sellers still holding out for full rates, and buyers refusing to pay the same, though willing to take any parcel that may be found offering cheap. About 300 tons have been changed hands at 68l. cash for Unmetata, and 68l. 10s. per ton for same brand with two months' prompt; 68l. per ton for good brands, and 69l. per ton cash for J. Edwards. Australian sorts in good demand, and for Wallaroo there are several large enquiries in the market, but the importers, having disposed of all their stock, are unable to do anything except for forward delivery. As regards English, low descriptions have become, if anything, rather firmer, with a fair business doing, and there is a slight improvement to note in manufactured, though as yet without any sensible renewal of orders from the East.

**TIN.**—Of the 300 tons of Straits and Malacca which were sold by tender on the 20th inst., 70 tons realised 130d. 6d. per cwt., and 200 tons 131s. per cwt., and 34 tons to arrive at 131s. 9d., bids having been made for about three times the quantity offered. The market has not experienced any depression on account of this sale, and values are as high as last week, with a prospect of further advancing. Banca here has fetched 135s. 6d. to 136s., and in Holland it is reported at 78½l. delivery ex next sale, and 79½l. with ordinary prompt delivery. English barilla is another 10s. per cwt. owing to the difficulty in procuring supplies of ores, which also prevents smelters from selling to any except regular customers, and only to them in small quantities.

**CHEMICALS AND MINERALS.**—(Messrs. J. Berger Spence and Co., Manchester).—For chemicals the market this week has been very much firm, and in a few instances prices have improved, resulting from the pressure of the last two or three months upon producers. Caustic soda is now obtainable only at an advance of 5s. or more per ton. There is a heavy demand for soda ash. Bleaching powder has at present a slight tendency upward; buyers, however, are rather slow in their purchases, anticipating a decline; eventually, no doubt, because of new process will materially reduce its value. Soda crystals are not very active. The demand for sulphate of ammonia is not quite so great, but prices show no symptoms of decline. Nitrate of soda continues to advance, and 15s. 9d. is now obtainable. Green copperas is in more request. The shipments of chemicals to Canada are rather large, but to the States there is a falling off. An improvement is advised in the New York market, and some large sales have been effected for present delivery and to arrive. Disinfectants are in favour, though not to the extent expected, and desirable. Benzole rather quiet. Bicarbonate unchanged. Prices of collic and hematite ores have an upward tendency. The Cleveland district is opening out new mines. Pyrites briquet is in demand. Chromo ores are expected to arrive from new sources. Mineral phosphates hold a satisfactory business; Coprolite lead as usual; but Carollina claim, and are likely to claim, marked attention. A report of the discovery of some rich phosphates has reached us



novel plan of transferring certain portions of the costs to a "suspense account" (which now amounts to 10500.); in other words, while the present shareholders are to receive regular dividends, a debt is accumulating for their successors, should the mine at any time become poor.

Tankerville has been largely dealt in, and at one time declined to 15½, but leave off better at 16 to 17. The lode is looking richer than ever in the bottom sunk below the 100. West Tankerville, 3½ to 4; this mine is also improving, and getting into a good position. Bronfloyd stock, 100 to 105. Blaen Caelan, 1½ to 1½; this mine is reported to be looking well, and sampled 100 tons of lead ore yesterday. Bog, 2½ to 2½; Dolcoaths have advanced this week to 150, 190. Prince of Wales shares have been better at 18s. to 20s.; the 90 east is looking more promising. The 77 west is worth 18½ per fm. for copper, and the 77 fm. level end 102 per fathom for tin. Gwydyr Park, 17s. 6d. to 22s. 6d.; the prospects here, the agent states, continue to improve. The slope in the 15, at the new mine, is worth 1 ton of lead per fathom, and looking well in the bottom. In the bottom of the 8 the lode is worth 2½ tons per fathom. Eleven tons of lead from the old mine have been sold this week; and when the crusher is complete by the end of the month regular sales will commence from the new mine. West Caradon, 2½ to 2½; Allen's lode, in the 66, west of cross-cut, will turn out 2½ tons of copper ore per fathom; the 55 east, 1½ ton. Providence Mines, 24 to 25; we understand an accident has happened to the machinery here, which will interfere with the returns of tin for the next account. East Basset, 7 to 9; East Caradon, 4½ to 5½; East Lovell, 11½ to 12; East Setons have been more in request, and leave off 25s. to 30s.; Great Laxey, 16½ to 17½; Great Western, 1½ to 1½; Herodsfoot, 40 to 42; Marke Valley, 5½ to 6; New Lovells in request at 2½ to 2½; North Roskear, 17 to 18; East Van, 11½ to 12.

Wheal Buller shares, which a short time ago were at 2½ each, and the mine so poor that many shares were forfeited and relinquished, have risen to 30, but leave off flat, at 27½ to 30. A week or ten days ago more than 100 of these forfeited or relinquished shares were sold by the company at 11½ each, and the sum so realised paid off the debt of the mine, which is looking better in Hocking's shaft. At Rosewall Hill and Ransom United meeting the accounts showed a loss of 2600. on the three months' working, and 2000. against the company. South Carn Brea shares have advanced to 2, 2½, and a large business done in them. The 130 end east is worth 35½ per fathom; the slopes in back of the 130, 35½; the 108 end east, 25½ per fathom. New Rosewarne, 55 to 65; the engine went to work on Saturday last, and in a short time the lode will be seen at the 58. Parys Mountain, 3 to 3½; Pennerley, 4 to 4½; Perkins Beach, 1½ to 1½; Plymlynn, 1½ to 2½; Roman Gravels, 19 to 19½; South Condurrow, 9½ to 10½; South Frances, 56 to 58; Spearne Moor, 18 to 20; Tincroft, 48 to 50; Trumpet Consols, 16 to 18; Van, 56 to 58; Van Consols, 25s. to 30s.; West Basset, 5 to 5½; West Chiverton, 17½ to 18½; West Pant-y-go, 1½ to 2½; South Caradon, 10s. to 15s.; West Seton, 130 to 140; Wheal Jane, 40 to 42½; Wheal Kitty (St. Agnes), 10 to 10½; Wheal Mary Ann, 7 to 9; Wheal Seton, 28 to 32; Wheal Uny, 9 to 9½; Hingston Down, 3 to 3½. Leeds and St. Aubyn, 8 to 10; we understand driving has been commenced at the bottom of the shaft on a good lode, and the returns will now increase. The last sale left a profit on the month.

Foreign mines have been, on the whole, rather flatter, and not so much business doing in them. Eberhardt and Aurora declined 1½, and leave off 35 to 36; the remittance this month is 53000. South Aurora declined to 2½, 3, and leave off 2½ to 3½. Pacific shares have been better, at 5 to 5½; the advices continue favourable. Chontales shares have been largely dealt in, at 2 to 2½, in anticipation of the next mail. Sweetland Creek, 3½ to 3½; the remittance for 46 days is \$6000, after paying taxes \$7500, and work a tunnel, &c., \$1100. Don Pedro, 3½ to 3½; the profit for the month of July was 3032½. In the 25 a rich line of gold has been gone through, a miner's hat full of the stuff from it having yielded 300 ozs.; this line should, if it holds down, yield a large quantity of gold. Taquaris have been weaker, at 7s. to 8s. Linares, 3½ to 4½; the directors have declared a dividend of 5s. per share. Fortuna, 2½ to 3; a dividend of 3s. per share has been declared here. Alamillos, 1½ to 2; the dividend here is 1s. 3d. per share. Utah, 17½ to 17½.

The market for Mine Shares on the Stock Exchange during the week has been, in common with the railway and other markets, in a state of considerable excitement, consequent on the somewhat unexpected advance in the Bank rate of discount from 2 to 3 per cent., and the large influx of bullion from the Bank and from the country, but mine shares have not suffered to anything like the extent other securities have. Foreign mines have suffered most, but even in this description in some instances an advance has been established, while shares in tin mines have maintained great steadiness, and have been in considerable demand on local buying.

In Foreign Mines Eberhardt shares are last quoted 35 to 35½. Advices have been received from the mine of an encouraging character, in addition to which a lengthy detailed report has been received, which will be issued to the shareholders in the course of a few days. Utah, 17 to 17½; further advices have been received during the week from the company's commissioner, from which it would appear that present development warrants the erection of a large number of furnaces in addition to those now in use and in course of construction. Shares are in considerable demand, and purchasers would appear to be locally connected with this class of enterprise. South Aurora shares have risen from the lowest point. Advices will be found in another column. St. John del Rey shares are steady at 81 to 32. Birdseye Creek, 4 to 4½; Mr. Stone, the company's agent, writes that the main works undertaken by him for the enlargement of the company's aqueduct are being vigorously pushed forward by a large force of Chinese labourers, and that already three miles have been completed. The main tunnels are also being driven, and he is of opinion that the estimates of profits in the autumn will be fully realised, and that large profits may be relied on for very many years. Chontales have been enquired for at 2 to 2½. Sweetland shares are rather less firm at 3½ to 3½; the clean up for the last run resulted in a profit of \$12,100. Don Pedro returns show an increased profit upon the month. Pacific, 5 to 5½; Captain Pridaux's reports continue to be of a highly encouraging character. Sierra Buttes are last quoted 4½ to 4½; Almada, 1 to 1½ per share. Silver Plume, 2½ to 3½; a remittance of silver ores has already been sent forward.

In Lead Mines Tankerville, after falling to 15, close firm at 16 to 16½; reference is made to the report in another column. Van, 56 to 57; the driving, both east and west in the 45, or bottom level, is reported as continuing as rich as ever. East Van shares have been dealt in to a considerable extent, closing 11½ to 12. Bog, 2½ to 2½; the report from the mine is very good; it is found that the shaft is clear from the 80 to the 100; the 80 fm. levels are found to be full of stuff, the whole of which will pay for passing through the dressing-floors. Roman Gravels, 18½ to 19½; the mine in depth is proving to be very rich. Pennerley, 4 to 4½; the sales of ore show an increase, and from present developments profits at an early date may be confidently expected. Perkins Beach, 1½ to 1½; the putting up of the underground engine is nearly completed. Great Laxey, 16½ to 17. The changes in other lead mines are unimportant.

In tin mines, West Frances have risen to 72½ buyers. Cook's Kitchen, to 31½; Uny to 9½; Tincrofts are steady, at 49 to 50; Carn Brea, 142½ to 145. In Buller an important advance has been established, shares being last quoted 30 to 32. North Roskear since the meeting have been dealt in at 16 to 18. In Copper Mines no appreciable change of quotations has taken place, although West Caradon are in demand. The subjoined are the closing quotations:—Carn Brea, 142½ to 145; East Lovell, 12½ to 12½; Tincroft, 49 to 50; Great Vor, 9½ to 10; Grenville, 7 to 7½; Buller, 30 to 32½; West Chiverton, 17 to 17½; Roman Gravels, 18½ to 19½; South Caradon, 190 to 210; West Caradon, 2½ to 2½; Cape Copper, 9½ to 9½; Devon Consols, 98 to 102.

THE BRAGANZA GOLD MINING COMPANY, with a capital of 50,000Z., in shares of 1Z. each, and which, it will be recollected, was formed to work the Morro Tabac freehold gold mine, have authorised Messrs. George Burnand and Co., of Lombard-street, to receive subscriptions for 14,000 unallotted shares. The company are now enabled to offer an additional inducement to investors from having acquired an additional property—the Morro da Gloria estate—upon very

favourable terms. The company is to have a lease of the mine, with use of mill, houses, water, timber, pasture, &c., on payment of a royalty of one-tenth. The Morro da Gloria is about six miles from the Morro Velho. There is a fine lode—the Esperanga—10 ft. wide, from which a large quantity of rich ore was extracted in the rudest manner by the Brazilians until they reached the water. There are likewise the "Mina rica," and a lode west of the Esperanga, which, in the opinion of Capt. James Eslick, of the St. John del Rey Mines, are two strong champion lodes. They can be traced on the top of the mountain for more than a quarter of a mile, the direction being in almost a straight line to the Cata Branca, which was famed for its richness during the time it was worked. San Antonio, the most western lode, is composed of magnificent quartz and some iron; these indicate great richness when seen in auriferous lodes. Mr. H. Dumont, C.E., graduate of the Central School of Paris, reports that the conditions for working the mine on a large scale are of the most favourable description, and concludes by stating that of all the mines at present known in the province of Minas Geraes Morro Velho is the first, the second is Morro da Gloria. The reports of Capt. John Roberts and of Capt. W. H. Richards are likewise very favourable. The prospectus will be found in another column.

At the Truro Ticketing, on Thursday, 3596 tons of copper ore were sold, realising 13,799.7s. The particulars of the sale were—Average standard, 101½. 1s.; average produce, 6½; average price per ton, 34.17s.; quantity of fine copper, 244 tons 8 cwt. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
Aug. 31.	1467	101 14 0	6 ½	32 12 0	11s. 6 ½ d.	£37 14 0
Sept. 21.	3596	101 1 0	6 ½	34 17 0	11 4	58 12 0

Compared with the last sale, the decline has been in the standard 12, 10s., and in the price per ton of ore about 2s.

At the Great Laxey Mining Company board meeting, on Sept. 16, the directors declared a dividend of 6s. per share for the past quarter. At the Bradda Mine meeting, on Thursday (Mr. J. Spittall in the chair), it was stated that the sales of ore during the past half-year had realised 883. 5s. 6d., and there are now on the mine about 10 tons of lead and 58 tons of copper ore. Referring to the financial position of the company, the Chairman stated that there was a balance of 9000. in hand. A long discussion took place as to the advisability of continuing at the same time the development of the mine at both the main points of interest—at Spittall's shaft, and also at the main engine-shaft, which is being sunk in order to effect the junction with Bulwark lode. The latter is the main point of interest in the mine, and it is upon the results to be attained by this junction that the hopes of the shareholders are at present fixed. It was agreed to concentrate all their resources towards effecting the junction. Messrs. W. F. Moore and J. Spittall, the retiring directors were re-elected, and Mr. Haining appointed auditor.

At Wheal Grenville general meeting, on Wednesday, the accounts showed a cash balance in hand of 752½. 6s. 2d., and a balance of assets over liabilities of 1186½. 3s. 2d., after charging up the costs to the end of August. A dividend of 2s. per 317½th share (the number of shares now afloat) was declared out of the cash balance in hand. Particulars of the meeting will be found in another column.

The letters of allotment and regret in Earle's Shipbuilding and Engineering Company were posted by Messrs. Chadwick, Adamson, Collier, and Co., this evening. The total number of shares spontaneously applied for was 9500.

East Bottle Hill Mining Company (Limited) shares have been done at 8½ to 9½.

COAL MARKET.—The supply this week has been very moderate, only 71 fresh ships having come forward. The demand for household coal exceeded the supply, and prices further advanced fully 6d. per ton. Hartley coals continue a ready sale at last week's quotations. Hetton Wallsend, 19s. 6d.; Tees Wallsend, 18s. 9d.; East Hartlepool Wallsend, 18s. 6d.; Harton Wallsend, 16s. 6d.; Hetton Lyon's Wallsend, 16s. 6d.; Hawthorn Wallsend, 16s. Ships at sea, 20. Unsold, one cargo.

#### THE LATE MR. EDWARD COOKE.

It is with the deepest regret we have to announce the death of Mr. EDWARD COOKE, at the comparatively early age of 49. Mr. Cooke has been for many years extensively and honourably connected with mining enterprise, and a regular contributor to the columns of the Journal. His whole life and character is a marked example of what may be accomplished by a determination and honesty of purpose, inasmuch as, under somewhat adverse circumstances, Mr. Cooke advanced to the first place in the community with which he was associated. His many virtues were equal only with the sincerity of his friendship. His hand was ever ready to forward the interests of the really deserving, and to assist the necessitous. His kindliness of disposition had surrounded him by an unusually large circle of friends, many of whom manifested their sympathy by paying the last tribute of respect to his memory. His loss will be long and deeply felt. Mining has thus been deprived of a most able, consistent, and strenuous advocate.

#### TELEGRAPHS.

**WANTED, A CHIEF INSPECTOR.**—Apply, stating age, experience, &c., to Mr. HENRY MOXON, Lancashire and Yorkshire Telegraph Superintendent, Victoria Station, Manchester.

**GOOD LABOURERS**, accustomed to MINING WORK, can have ASSISTED PASSAGES to the Colony, and CONSTANT EMPLOYMENT at the CAPE COPPER MINING COMPANY'S WORKS at the CAPE OF GOOD HOPE. The climate is healthy. For further particulars apply, by letter, to the Secretary of the Cape Copper Mining Company, 6, Queen-street-place, London, E.C.

**WANTED, A THOROUGHLY EXPERIENCED MANAGER** for a SILVER-LEAD MINE on the CONTINENT. State salary required and full particulars by letter. "A. B.," Messrs. Whitehead, Morris, and Lowe, 168, Fenchurch-street, E.C.

**WANTED IMMEDIATELY, A GOOD PRACTICAL AND EXPERIENCED AGENT TO TAKE CHARGE OF AND MANAGE A LEAD MINE** in the neighbourhood of SHREWSBURY. Must be conversant with dialling, mapping, &c., and capable of keeping the mine accounts. Apply, with testimonials and references, to F. R. A. FRANKLYN, Esq., 18, Austin-friars, London, E.C.

**WANTED IMMEDIATELY, for six months, an AGENT,** experienced in SILVER MINES and REDUCTION OF SILVER ORES, to accompany an ENGINEER TO SOUTH AMERICA, there to EXAMINE and REPORT ON MINES. Address, stating experience, terms, &c., to Messrs. PADDISON, SON, and LIGGINS, 57, Lincoln's Inn-fields, W.C.

**WANTED, A SITUATION as CLERK, or CONFIDENTIAL AGENT,** to an IRONMASTER, COLLIERY PROPRIETOR, or to a MERCANTILE HOUSE, &c., in town or country; he is conversant with Keppel Books by Double Entry, and with the details of Mining Operations. First-class references can be given. Address, "J. A.," MINING JOURNAL Office, 26, Fleet-street, E.C.

**WANTED, SHARES IN CARN CAMBORNE MINE.**—State number and lowest price to "Alpha," Post Office, Romsey, Hants.

**A N ENGINEER, proceeding to SOUTH AMERICA,** would be glad to receive from Manufacturers of Mining and Railway Plant DETAILED PRICE LISTS. Address, Messrs. PADDISON, SON, and LIGGINS, 57, Lincoln's Inn-fields, W.C.

**A MINING ENGINEER, of large experience, OFFERS his SERVICES** to anyone requiring REPORTS, VALUATIONS, PLANS, ESTIMATES, or ADVICE of any kind as to the OPENING OUT or WORKING of MINERALS at home or abroad. Address, "C. V. and M. E.," MINING JOURNAL Office, 26, Fleet-street, E.C.

#### CASHIER, OR MANAGER.

**A GENTLEMAN, who has filled his present position as above in a large Manufacturing Concern for the past five years, is OPEN to a NEW ENGAGEMENT.** Highest testimonials and references. Security given. Address, "B. S. J.," MINING JOURNAL Office, 26, Fleet-street, London. September 4, 1871.

#### RE REV. RICHARD SANDERS, DECEASED.

**FOR SALE, by the Executors, ONE HUNDRED SHARES** in the NANGLE'S MINING COMPANY; TWENTY SHARES in the EAST CHIVERTON MINING COMPANY; and SIXTY SHARES in the WEST PANT-Y-GO SILVER-LEAD MINING COMPANY. Offers required. Apply to Messrs. Cox and Sons, Solicitors, 4, Cloak-lane, London.

**FOR SALE, A FIRST-CLASS LEAD SETT.** A shallow one. There are two north and south lodes running through the sett. Only one has been wrought on, and over £100 worth of lead has been sold. The engine-shaft is not 15 fms. deep. To treat for the same, apply to W. PAYNTER, Jun., Wadebridge.

#### ZINC AND LEAD ORES.

I AM PAYING as follows:—

BLEND.—185s. for 63 units of zinc, deducting 3s. 5d. per unit below.  
CALAMINE.—10s. more than for blend.  
LEAD-SILVER ORES.—215s. for 85 units of lead, deducting 3s. 3d. per unit below, all the silver being paid extra 5s. per ounce troy.  
ZINC AND LEAD ORES MIXED TOGETHER.—Very high prices.  
The above prices are fixed for a ton (20 cwt.) of ore, f.o.b. at Antwerp.  
I BUY any quantities, however large, contracting for as many years as agreed. Particulars by letter.

ARMAND FALLIZE, Ingénieur, à Liège (Belgium).

#### LLANELLY RAILWAY AND DOCK COMPANY.

**SURPLUS STOCK FOR SALE, owing to a REDUCTION** of the RAILWAY MILEAGE worked by the company.

SIX LOCOMOTIVE ENGINES, with TENDERS, all in good working order, being at present in actual use, viz.:—

1. "Victoria," six wheels, four coupled, 5 ft. diameter, 16 in. cylinders, 24 in. stroke.  
2. "Alfred," six wheels, four coupled, 5 ft. diameter, 13 in. cylinders, 18 in. stroke.  
3. "Alice," six wheels, four coupled, 5 ft. diameter, 13 in. cylinders, 18 in. stroke.  
4. "Louisa," six wheels, all coupled, 4 ft. 8½ in. diameter, 16 in. cylinders, 24 in. stroke.  
5. "Arthur," six wheels, all coupled, 4 ft. 8½ in. diameter, 16 in. cylinders, 24 in. stroke.  
6. "Wales," six wheels, all coupled, 4 ft. diameter, 15 in. cylinders, 18 in. stroke.

FOUR COMPOSITE PASSENGER CARRIAGES.

THREE THIRD-CLASS

Each engine and carriage will be a separate lot.

Sale to be at Llanelly Dock on Monday, the 9th of October next, at Four o'clock in the afternoon, subject to such conditions of sale as will then be produced.

Further particulars may be obtained of the Secretary of the company—MR. R. GLASCODINE, Llanelly.

**WEST CHIVERTON MINE.**—SHAREHOLDERS.—Do not be misled as to the position and value of your property. Ascertain all truth by communicating with Mr. WOODWARD, Truro.

**WHEAL JANE MINE.**—WANTED.—SIX SHARES. Sellers please address "Investor," care of Mr. Woodward, Truro.

**LANESTOSA LEAD AND ZINC MINING COMPANY (LIMITED).**

The LIST OF APPLICATIONS for SHARES WILL CLOSE on MONDAY NEXT, the 25th September. H. SWAFFIELD, Secretary.  
6, Queen-street-place, London, E.C.

**OFFERS WANTED for the following MINING SHARES:—**

50 GREAT SOUTH CHIVERTON.  
105 LANASTON.  
10 KAST TRUMPET.  
50 TIN VALLEY.  
50 LOVELL CONSOLS.  
40 GREAT ROCK.  
40 EAST WHEAL REETH.  
50 NORTH JANE.  
150 THE LOVELL.

No reasonable offer refused.  
Address, "J. P.," 438, Stockport-road, Manchester.

#### HEMATITE IRON ORE ROYALTY.

**TO BE LET, OR SOLD, THE RIGHT OF WORKING A** HEMATITE IRON ORE ROYALTY, in the County of WICKLOW, IRELAND. The ore near the surface contains 53 per cent. metallic iron. Apply to Mr. JAMES SAUNDERS, 61, Darlington-street, Wolverhampton.

**TO SELL, OR LET ON HIRE, for cash or deferred payments,** FIFTY COAL WAGONS, hopper built, with bottom and side doors, carrying seven tons. Apply to MASTON COAL COMPANY, Leeds.

**TO CONCESSIONAIRES, PROMOTERS, AND FINANCIERS.** SHARES IN NEW ENTERPRISES SUCCESSFULLY INFLUENCED AND PLACED. Address, in perfect confidence, "Operator," care of John Baptist Wolpert, Advertising Agent, 24, Austinfriars, E.C.

**HITCHENS AND CO., MINERAL AGENTS AND SURVEYORS.** NEW POULTRY CHAMBERS, LONDON, E.C. REQUIRE A RESPECTABLE YOUNG MAN for OFFICE DUTIES, who is able to make Plans and Sections. He must be a good penman, and well up in figures. Apply, in own handwriting, as above, stating salary required.

**GENERAL MINING OFFICES,** BEDFORD FOUNDRY, TAVISTOCK, CONDUCTED BY

MR. CHARLES F. COLLOM, MINING ENGINEER, AGENT, AND SURVEYOR, Who undertakes the entire local Management of Mines, including Dialling, making accurate Underground Communications and Plans, at a stipulated salary.

Mines Inspected and faithfully Reported on, orders for which purpose should be made for Mr. Colлом, or his Agent.

Promoters of New Mining Enterprises (which will bear the strictest scrutiny) rendered every assistance.

Investments in Mines arranged for Capitalists,—the condition of the companies, as well as the prospects of the Mines, being first strictly investigated.

#### ABRIDGED PROSPECTUS.

**THE BRAGANZA GOLD MINING COMPANY (LIMITED).**

Capital, £50,000, in 50,000 shares of £1 each. Messrs. GEO. BURNAND and CO. are authorised to RECEIVE SUBSCRIPTIONS for 14,000 UNALLOTTED SHARES of this company.

Deposit, 2s. 6d. per share on application, and 2s. 6d. on allotment; the balance to be called up as required, but calls not to be made at intervals of less than three months.

CHARLES MORRIS, Esq., Director of the United Mexican Mining Company (Limited).—CHAIRMAN.

THE CONSOLIDATED BANK (LIMITED), Threadneedle-street, E.C.

BROKERS—Messrs. GEO. BURNAND and CO., 69, Lombard-street, E.C.

The company has been fortunate in acquiring an additional property in the well-known Morro da Gloria Mine, at a simple royalty, and situate within five miles of Morro Velho, the St. John del Rey Company's Mine, on more favourable terms than have ever hitherto been made to an English company, and it is now offered to the present shareholders and the public with all its numerous advantages, including plant, timber, pasture roads, water, &c., without any purchase, premium, or preliminary expenses, therefore none of that outlay attached to foreign gold and silver mines of the present day. The proprietor shows the great confidence he has both in his own property and in this company in thus handing it over to the Braganza.

The company's capital is ample to develop and work the respective properties, which can be done under one and the same administration at a great saving of expense.

Reports and full particulars, with form of application for shares, can be had at the brokers, bankers, and at the office of the company. By order, W. M. EDWARDS, Secretary.

4, Coleman-street-buildings, Moorgate-street, London, E.C.

#### LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
Aug. 26.—	Holyfield	24	£11 11 3	Shield and Dinning.
Sept. 18.—	Pennerley	65	11 10 6	Peter Glover.
	Bog	20	11 10 6	ditto
19.—	Plymlynn	20	11 2 0	Burry Port Company.
	ditto	20	11 2 0	Stine, Williams, & Co.
21.—	Wheal Mary Ann	55	21 15 6	Trefry's Estate.
	ditto	45	12 5 6	ditto
	Ballacorkish	33	14 15 0	Mining Co. of Ireland.

#### BLACK TIN.

Date.	Mines.	Tons c. q. lb.	Price p. ton.	Amount.	Purchasers.
Sept. 16.—	Wheal Uny	11 8 2 10	£79 5 10	£966 5	1—Redruth Tin.
	Pedra-an-drea	12 6 1 1	80 0 0	988 2	—
20.—	Penhalls	6 5 3 22	80 0 0	508 15	8—Daubus.

**LYNCLY.**—During the present week in driving east from Ranter's shaft good lumps of solid lead ore are being raised and brought to surface—in fact, nothing can look more promising, and the lode is still improving. Also in driving west from this shaft the lode in the end looks well. The present prospects of the mine are such as to warrant a safe investment, from the various known lodes opened upon and ore being found. Applicants for shares should lose no time, as there is every likelihood of the same being at a premium at an early date.

**GLASGOW CARADON (Copper).**—Great improvements are taking place in this mine. The mine has been making small profits, but from recent discoveries the sales will increase, and profits also. The stock is chiefly held in Glasgow. Two parts of Harvey's lode, only 2 fms. apart, are worth together over 350 per fathom. There are 240 fms. of ground to the east, as likely to be productive as the ground to the west, at present being worked. The mine immediately adjoins East Caradon, and is worked on the South and East Caradon lodes.



## GMELIN'S CHEMISTRY.

Messrs. HARRISON and SONS have the pleasure to announce the completion of the

## H A N D - B O O K O F C H E M I S T R Y .

Translated and Edited by HENRY WATTS, B.A., F.R.S.  
The concluding volume (the 14th) will be published in October.  
An INDEX to the entire work is in preparation, and will be ready in January, 1872.  
HARRISON and SONS, Booksellers to Her Majesty and H.R.H. the Prince of Wales, 59, Pall Mall, London, S.W.

## Notices to Correspondents.

\* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt: it then forms an accumulating useful work of reference.

TRIBUTORS' ORES.—If "B.S." will calculate the quantity of fine copper in each of his five parcels at the produce given, and add the quantities together, he will, I think, find about 2,333 tons in all. This gives considerably more than 6 per cent. produce for the public parcel. It seems that the 31 7s. 6d. was given for 6½ (not 6) per cent. ore. I will, therefore, ask whether the figures printed are those he intended? Assuming the produce of the several tributors' parcels to be correct, and that the mixed parcel made 6½ produce, and sold for 31 7s. 6d. per ton, the distribution by the formula given (with a slightly smaller difference for produce which recent experience proves to be necessary) would be—

No.	T. cwt. qr.	Produce.	Per ton.	Total.	Share of balance.
1	15	2	7½	£3 14 6 = £ 6 13 1½	1s. 4d.
2	16	11	2	2 11 2 = 42 7 4½	8s. 6d.
3	6	7	2	4 8 5 = 28 2 4	5s. 7d.
4	5	11	2	3 19 6 = 22 1 3	4s. 5d.
5	9	3	1	2 10 6 = 22 5 5	6s. 5d.

The necessity for the surplus arises from the fact of the produce of the mixed parcel (as calculated from the produce given for the several parcels) being really not exactly 6½. These slight differences will always arise in practice; but even here, where there are five parcels of very varying produce, the difference amounts to less than 2½d. in 1. I have given the figures roughly (though they will probably suffice for practical men) because, not knowing where the inaccuracy in the figures of "B.S." may be, my calculations may be based upon false data.—AVERAGE STATER.—[Tables are in course of preparation, and will shortly be published, for enabling such calculations to be made almost at a glance.]

WEST DRAKE WALLS.—"Another Shareholder."—A report from this mine appeared in last week's Journal.

SOUTH AFRICAN SILVER AND COPPER MINING COMPANY (Limited).—As soon as the prospectus is ready for publication it will appear in the Journal.

MINN SURVEYING.—"Mine Agent" (Liskeard).—If you have already Budget's Miners' Guide, and require another book, perhaps Mr. Haskell's edition of Stumm's Practical Tunnelling would suit you. It is published at 1s. by Lockwood and Co., Stationers' Hall-court, and explains in detail the setting out of the works, shaft sinking, and heading driving, ranging the lines, and levelling underground, &c. The opinion "Mine Agent" expresses of Budget is not general, but perhaps "Mine Agent" has not studied it. Many of the best diallers owe their position to the instruction it gave them.

"SUBSCRIBER."—We tell you so, fully.

CHIVERTON VALLEY.—Will any correspondent give some information respecting the position and prospects of this mine?—A SHAREHOLDER.

SITUATION WANTED.—"K.S.," who advertised in the Journal of Aug. 19, can send to our office for letters, and communications forwarded by us to the address given at Cambridge having been returned through the Dead Letter Office, marked "not to be found."

Received.—"T.W."—"H.J.B."—"Enquirer"—"Nemo"—"Shareholder" (Leith).—"J.P." (Blaugdon).

THE MINING JOURNAL,  
Railway and Commercial Gazette.

LONDON, SEPTEMBER 23, 1871.

## RAILWAY AMALGAMATION.

The question propounded by Sir EDWARD WATKIN at the recent meeting of the Manchester, Sheffield, and Lincolnshire Railway is one of the most vital importance to all classes of the community, and no wonder it is creating considerable interest amongst railway shareholders, the commercial community, and the public generally. Sir E. WATKIN broadly proposes that the whole of the railway companies should be amalgamated, and that the whole railway business of the kingdom should be conducted as one gigantic concern, by one responsible board of management. The question is not altogether new, for when Government purchased the telegraphs there was a general impression throughout commercial circles that it was but the prelude to their purchase of the railways, with the view to their amalgamation, and more efficient working by the State. Sir E. WATKIN, however, is evidently adverse to the railways being placed in the hands and under the general control of the Government, for he stated that the object of the proposed amalgamation was to endeavour to find a remedy which would preclude the necessity for Government interference. The fact that a general amalgamation has been recommended by a gentleman of such vast experience, and of such undoubted knowledge upon railway matters as Sir E. WATKIN, leads to the inference that he is not satisfied with matters as at present managed, and bears out the remarks which we made a week or two since, that our iron highways might under more direct and more central management be far more utilised for the general good.

The amalgamation scheme, as revived by Sir EDWARD WATKIN, has many features which commend it to favourable consideration; but a question of such all-important gravity demands the most deliberate and serious study and consultation. By a general amalgamation, the expenses of management might be materially reduced, return tickets to the public could be granted all over the country, and many other matters of detail would, no doubt, be effected, which would enhance the comfort and convenience of passengers. But as representing the great mining and commercial interests of the kingdom, we have considerable hesitation in giving the scheme unqualified countenance and support. Looking at the history of railway management in this country, we find that there have been far greater efforts made for the convenience of passengers than the development of commerce or the opening up of vast mines of mineral wealth; the commercial interests—the large staple manufactures—have been pushed aside, so far as their trade wants and requirements are concerned, in favour of smaller schemes for passenger traffic. Should the scheme of Sir E. WATKIN be carried into effect, what guarantee will be given that any improvement will take place in this respect? The very essence of the amalgamation scheme is that all competition will thereby be avoided; but are there not most palpable benefits arising in the carriage of minerals and goods by having "two strings to the bow"—two lines communicating with the great centres of manufacturing industry and the ports of embarkation? Of course we admit that under a monopoly so complete as the general amalgamation would effect, Parliament could apply the same principle as that which now governs waterworks, gasworks, and other works of such character—that is, that when a profit of (say) 10 per cent. has been made, then the public shall participate in the advantages in lower fares and rates. But here, again, past experience shows that where such a happy state of things does exist the directors are very chary in giving the public the advantage of good trade, preferring to expend the surplus upon works of questionable utility or ornamentation.

Following close upon the suggestion of Sir EDWARD WATKIN, we find that the London and North-Western Company and the Lancashire and Yorkshire Company have not only settled their differences, but have virtually amalgamated, and effected a junction, and made what has been termed a "common purse." The capital of the London and North-Western is over 55,000,000£ sterling, and that of the Lancashire and Yorkshire nearly 25,000,000£, and the aggregate mileage of the two companies something about 2000, whilst both companies combined transport about a fifth part of the entire railway business of the country. Should the terms agreed upon by the directors of the two companies be ratified by their respective shareholders, and there appears every prospect that such will be the case, there will be one all-powerful company, with a capital of nearly 100,000,000£, and a gross revenue of about 10,000,000£ per annum. Such a company must have a great influence upon the railway business, either for good or evil, and we can scarcely fail to perceive in the arrangements which have been effected the commencement of a

movement which shall have for its object a great single centre of management for our present complicated railway system, and that the management shall be vested in the State.

What the great mining and commercial industries of this kingdom now require, and what they should not rest satisfied until they have obtained, is two or three trunk lines running through the heart of the kingdom, devoted exclusively to the requirements of the coal, iron, and other staple trades of the kingdom. We believe the time is not far distant when railway directors will see it to their own interest to adopt some such plan. Accidents would be avoided, and traffic, both passenger and mineral, be vastly expedited. Possibly, if the scheme of Sir E. WATKIN be carried out, some of the competing lines of the kingdom could be devoted exclusively to the purposes of commerce, thus affording considerable relief to the passenger traffic. One thing, we believe, is most obvious to all who will give the subject a little serious consideration, and that is that our railways as at present managed are not giving either the passengers or the commercial interests those benefits which they have a right to expect. It is high time that some change should be made in more directions than one. The fares, both for passengers, for goods, and for minerals require substantial reduction, and we firmly believe if such reduction were made trade and commerce would expand, and benefits be conferred in other directions.

Whether the amalgamation, as propounded by Sir EDW. WATKIN, be carried or not, nobody can fail to see that our whole railway system must shortly engage the serious attention of Government, with a view to remedy the many evils resulting from the various lines being in the hands of so many private companies, who are almost regardless of public convenience or public requirements when their own private interests are concerned. In the remarks we have made our object has been not so much to depreciate the future history of our railways—into whatever hands the management shall fall—greater care shall be taken for the safety of passengers on the one hand, and more zeal displayed on the other hand to promote and develop the staple trades of the kingdom. The amalgamation scheme has many ardent supporters amongst the directors and shareholders, and also a large class of the public, who probably see that it points to the no distant date when Government shall adopt the same policy with respect to our railways as they have already done with the telegraphs, and if equal benefits result therefrom no class of the public will have cause to regret.

## MACHINE PUDDLING.

Is the finished iron trade just within reach of that of which they have been so long in quest? It really seems like it; and yet the news appears too good to be true. The problem will, however, soon have its solution. We shall then know if in the United States there is at work a rotary puddling-furnace which, although not very different from that with which Mr. MENELAUS has been experimenting, yet has distinguished itself with the important difference of having been a success, whilst the British machine cannot be so regarded. It will be some consolation for men who have nationality jealousies, that if all that is claimed for Mr. DANKS's machine should prove true, then that Mr. DANKS—if we are not misinformed—is not an American, but an Englishman. Our information is that Mr. DANKS is a native of the Black Country, and that in early life he was actively engaged in iron manufacture about Dudley and West Bromwich. But whether this be so or not—and we mention it only that a yet closer interest may thereby be invoked in what he has done—Mr. DANKS has deputed himself in reference to his invention in the frankest possible manner. The paper that he contributed to the recent meeting of the Iron and Steel Institute, and the explanation with which he accompanied it, all of which was reported in the Supplement to the Journal of Sept. 2, will go far to make the meeting in Dudley more memorable in the history of the iron trade than that meeting in Cheltenham, at which Mr. BESSEMER read to the British Association his famous paper, will prove to the steel trade. It was impossible to resist the conviction that Mr. DANKS had been most straightforward. The report that we supplied at the time will have conveyed that impression to every reader. Much deeper will that impression have been made upon the minds of those who listened to Mr. DANKS. Side by side with that of which most of us have knowledge, in reference to some inventions of American origin, and in respect of some American inventors, this is most encouraging at the present stage of the enquiry. To the uncertainty which too often overhangs the English mind on such matters, and to the good reason there often is for it, Mr. MENELAUS bore testimony before Mr. DANKS got up, when he remarked that without all disputing that Mr. DANKS had accomplished all to which he laid claim, he could not forget that some time ago an American inventor was at the Dowlais Works for about a year, receiving all the help that the firm could afford him, yet he was unable to make anything else than a miserable failure of that which it had been said was a splendid success in America. Whilst such experiences reasonably make the British ironmaster cautious, they do not prevent him from looking with hope, amounting almost to confidence, to the result of the enquiries that he is about himself to institute into the merits of the new claimant for his favour.

Mr. DANKS has not brought his invention under the notice of the iron trade of Great Britain before it has been well tested in the States. His paper furnishes particulars enough of the extent to which his machine has supplanted the old hand-puddling furnaces. But independent testimony comes direct from the States to conspicuous members of the industry here. Mr. WALTER WILLIAMS, the hon. sec. of the Ironmasters' Association of South Staffordshire, has a considerable experience of the finished iron trade, not only from a life-long practical acquaintance with it at home, but from careful observation of what is being done as well throughout the States as in those portions of the continent of Europe that are open to the inspection and the visits of the English ironmaster. He has been seeking to solve the machine-puddling problem. About to examine and pronounce upon the drawings of such an apparatus that had been submitted to him, he has been arrested by a message from the New World, of which the following is the pith:—"Withhold your judgment on the mechanical puddler; DANKS, a man in Cincinnati, has got a complete success." Better than this, Mr. HEWITT, one of the most accomplished members of the American iron trade, bears testimony in its favour. He, too, declares it a success, and enforces the testimony by adopting the machine in the place of the old furnace at an establishment in which he is pecuniarily interested. Hardly any room is, therefore, left for doubt that there is full truth in the asseveration of Mr. DANKS himself, to the effect that the machine is "as truly a success as that the members of the Iron and Steel Institute are men."

Assuming, then, that in America they have taken the one step that in England we have halted at, the enquiry arises—can that one step be taken here? That one step is an enduring lining. As to DANKS's machine, and the machine which is the invention of Mr. B. P. WALKER, of Wolverhampton, with which, as the purchaser of the patent rights, Mr. MENELAUS has been experimenting, we agree in great part with Mr. E. WILLIAMS. That gentleman remarked that looking at Mr. DANKS's machine with the eye of a practical man, he did not see anything in which it was likely to differ from what could be effected with the Dowlais machine, with Mr. MENELAUS at the end of it. But Mr. WILLIAMS could not see the initial lining, to which Mr. DANKS's success is almost entirely owing, and at which, he asserts, after it has been once applied, you may "fire till doomday without destroying it." It was the want of such a lining that defeated Mr. MENELAUS. Mr. DANKS finds in America a certain native mountain ore. Its value consists in this—that it contains a very small per cent. of silica. Any ore, Mr. DANKS affirms, that contains no more than 5 per cent. of that ingredient will effect the purpose. Whilst it is for our own iron trade, we take it, and not for Mr. DANKS, to find such a material, still that gentleman points out that he has seen in this country a Norwegian iron ore that contains even a smaller percentage of silica than 5 per cent., which seemed to him to be suitable for the purpose.

Upon being told that tap cinder contained only 2 per cent. of silica, Mr. DANKS expressed his belief that that would accomplish the purpose. He may be right with reference to the Norwegian ore, but we

think he spoke without sufficient information when he testified in favour of tap cinder. Our own experience of the bulk of tap cinder is that it contains a larger proportion of silica than is here indicated; and, next, we know that before WALKER's machine passed into the hands of Mr. MENELAUS tap cinder was tried for a lining and failed. But tap cinder and Norwegian ore, and any other material that suggests itself to them, the deputation of the Puddling Committee of the Iron and Steel Institute may take to America, and with it any and every kind of pig-iron used in this country, and there, as we understand, with Mr. DANKS himself to assist them, put lining ingredients and raw material to such a practical test as will enable them fully to report upon the merits or demerits of the machine in its application to the finished iron manufacture of the United Kingdom. It is hardly needful to say that the trade has confidence that the Committee will make their experiments in every way thoroughly, so that nothing shall remain to be decided by experiments on this side, inasmuch as to conduct thorough experiments in this country would involve a pecuniary outlay of no inconsiderable extent. In the interest of the great national industry affected, we look for further information from the Committee with much expectation.

Since the above was written the following has been made known:—The Puddling Committee met last week, and decided to send out a commission of three gentlemen, Mr. G. J. SMELUS, of Dowlais, and Mr. J. A. JONES, of Middlesbrough, were requested to form two of the Commissioners, and the selection of a third gentleman was left to the South Staffordshire ironmasters. The Commissioners will take with them 10 tons each of Welsh, Cleveland, South Staffordshire, and Derbyshire pig-iron, together with fettling available in this country. They are expected to set in about 10 days, and will be accompanied by Mr. DANKS himself. They will receive their instructions previous to starting, as the Puddling Committee have arranged to meet them at Liverpool the day before they sail. In case the Commissioners should send a favourable preliminary report, it is quite probable that arrangements will be made for putting up an experimental furnace and appliances in England for the purpose of thoroughly testing the plan. A number of firms have already expressed their willingness to find the needful funds, Mr. DANKS making arrangements for allowing the cost of royalties that may accrue in England.

## MOTIVE-POWER WITHOUT COST.

Reference has already been made, in the Supplement to the Mining Journal of July 22, to the advantages to be anticipated from the introduction of the Flux-Motor, invented by Mr. F. TOMMASI, wherever the rise and fall of the tide was sufficient to admit of its economic application, and it appears that the only serious objection raised against the employment of the motors for industrial purposes has been that there are very few places in which they could be used, for it is acknowledged to be undesirable to make the use of specially constructed engines compulsory. Feeling that this objection was a reasonable one, Mr. Tommasi has devised a means of removing it by securing to his motors a tension double that which would have been communicated to them by the height of the column of sea water available. To accomplish this he arranges during the flow tide to cause successively and alternately at each stroke of the piston of the working machine a portion of the compressed air from the reservoir to penetrate the tubes of the lower receivers of these apparatus, allowing the tubes of the upper receivers to communicate with the atmosphere. And, secondly, he puts successively and alternately at each stroke of the piston of the motive engine the tubes of the upper receivers, in communication with the discharge pipe of the cylinder of the working machine, allowing the tubes of the lower receivers to communicate with the atmosphere.

The result of the first arrangement is to force the water contained in the apparatus to rise in the upper receivers to a height proportioned to its tension, and the second arrangement, whilst forcing the column of water to rarely proportionately to its height the air which in the cylinder of the working machine naturally redoubles the power which exercises a pressure on the other side of the piston. During the ebb tide he puts successively and alternately at each stroke of the piston of the working machine the tubes of the upper receivers in communication with the rarefied air from the reservoir, allowing the tubes of the lower receivers to communicate with the atmosphere. This rarefied air forces the water to rise in the upper receivers to a height proportioned to its rarefaction. Secondly, he puts successively and alternately at each stroke of the piston of the working machine the tubes of the lower receivers in communication with the entrance pipe of the cylinder of the working machine, allowing the tubes of the upper receivers to communicate with the atmosphere. This arrangement, whilst forcing the column of water to compress in proportion to its height the air which in the cylinder of the motive machine must propel the piston, naturally redoubles the effect produced on the other side of the piston. The apparatus employed for carrying out these arrangements is very simple, and composed of few parts liable to get out of order. As the object of the improvements is to secure the same amount of advantage as is now obtainable with a tide of twice the rise and fall, its importance will be readily appreciated, and even increased interest will be felt in the results to be obtained with the apparatus, on full working scale, which it is understood the inventor is at present constructing on the coast of Essex. These results we shall publish as soon as the machinery is at work.

## RAILWAY IRON IN BRITISH AMERICA.

The great demand for railway iron which has been provoked by the revival of railway enterprise in British America still continues apparently unchecked. This will be seen by an examination of the exports of railway iron from the United Kingdom month by month this year in the direction indicated:—

Month.	1869.	1870.	1871.
January.....	110	100	100
February.....	1,113	750	—
March.....	2,224	2,583	2,607
April.....	4,736	5,371	5,929
May.....	4,789	3,450	6,077
June.....	4,618	3,495	12,566
July.....	1,648	6,763	9,838
August.....	3,356	2,589	10,976

Total..... 22,614 25,001 48,114

This increase in the demand in a long stagnant quarter has been one of the most encouraging features this year in the iron trade. It has compensated, in some degree, for the decline in the consumption of railway iron in India, and it is also valuable, inasmuch as it augurs a still larger demand in the future. At present, the work of railway construction is being hurried on in Canada, the principal new lines on hand being the Intercolonial, the air-line of the Great Western Railway of Canada, the Canada Southern, the Wellington, Grey, and Bruce, the Toronto, Grey, and Bruce, the Toronto and Lake Nipissing, the Toronto, Simcoe, and Muskoka Junction, the North Grey, the Canada Central, &c. Of these lines the most important is beyond doubt the Intercolonial Railway, and although this line has reached at present only an imperfect stage of development, it has made sufficient progress to justify the anticipation that it will be distinguished by a high degree of stability and excellence. The rails are of the best English steel, weighing 61 lbs. to the yard, and they are suited to resist the heaviest traffic, and to admit of the highest speed. All the bridges, with three exceptions, will be constructed of iron; these three were too far advanced before the arguments of Mr. FLEMING, the chief engineer, prevailed; but there will be no difficulty in replacing the wooden bridges at Rivière du Loup and two other smaller ones with iron, as the piers throughout are of solid masonry. A great quantity of steel rails and rolling stock have been accumulated for the Intercolonial system, which will be in working order by the close of 1872 or the commencement of 1873. The line will be steel-railed throughout, and this policy on the part of the Commissioners who have been entrusted with the great work marks an epoch in the railway history of Canada. Hitherto Canadian railway enterprise has been crippled by the enormous cost of renewal and maintenance, but the Intercolonial Railway Commissioners have profited by experience, and have resolved to get rid of this difficulty altogether by laying steel rails at the outset. The example will, no doubt, be followed with all practicable speed by the other chief Co-



Canadian railways—certainly by the Grand Trunk and the Great Western of Canada. The Grand Trunk once steel-railed, and the cost of maintenance once brought down to a reasonable level, the position of its long-suffering shareholders and bond holders will be greatly changed, and they will enjoy at last a fair return upon their capital. If this result could be attained, we believe it would prove highly beneficial to Canada generally, as every disappointed Grand Trunk investor has naturally become a severe critic of everything Canadian. With an improvement in Canadian railway credit there would be an improvement in Canadian affairs generally, and although anything like precipitation in railway construction is to be deprecated, as well in Canada as in other parts of the world, the regeneration of the Grand Trunk would, doubtless, give a still further impetus to Canadian railway enterprise. The reduction in the cost of steel rails and the severity of the Canadian winters render certain a large Canadian demand for the new essential element in thoroughly sound permanent way. Further, we may expect that the Canadian demand for railway iron—a phrase which must, of course, be taken to include steel rails—will be augmented from the fact that Canada is only now becoming a great power in the world. So long as the mother country cared little about her colonies, but was engrossed with her great struggle against NAPOLEON BONAPARTE, so long as Canada was disunited and torn by intestine convulsions, so long as Canada remained poor and English capitalists remained short-sighted, so long Canada languished on without much effort to turn her great natural resources to account. But all this is changed. The Canada of today is being riddled with railways, whilst she is mapping out more; she has united her scattered provinces, and with the strong arms and stout hearts which she is now seeking on this side of the Atlantic, she bids fair to expand into one of the first nations of the earth.

#### ANOTHER EXPLOSION AT THE MOSS PITS, WIGAN.

It is a Frenchman who pithily remarks, "The four elements of the ancients conspire against the collier—fire, air, earth, and water—all are against him. Fire threatens him in blasting, in the firing of the coal, and in explosions of fire-damp; the air, by becoming rarefied, or mixed with explosive vapours; the earth, in falls of roof, &c.; the water, by inundations." Of all these enemies fire is, doubtless, the most terrible. That terrible twelvemonth, reckoned from Dec. 1, 1866, to Dec. 1, 1867, is fresh in the recollection of all of us. Happily it is as yet without a parallel in the annals of British mining. Beckoning only the three great catastrophes that happened in that period—the Oaks, the Talk-o'-th'-Hill, and the Ferndale—we have a loss by explosions of 600 lives. Further, within the comparatively narrow district of South Lancashire we have had within the past three years, estimating from Nov. 26, 1868, the date of the Hindley Green calamity, to Sept. 6, 1871, the date of the Moss Pits accident, a death roll, likewise from explosions, of 312 miners. Within the two last-mentioned periods there were the explosions at Norley, Haydock (two explosions), Rainford, Park Lane, Low Hall, and Bryn Hall. Of all these single accidents the outburst at the Moss Pits has been the most disastrous. The Hindley Green killed 62 people, made 22 women widows, and 55 children orphans; the Haydock first explosion (Dec. 30, 1868) killed 26, and the second (July 21, in the following year) 59, whilst both together left only 41 widows and 97 orphans; but at the Moss Pits there were 70 miners deprived of life in the one accident, and 37 widows and 84 orphans were the melancholy result.

Unhappily, the explosion at the Moss Pits, on the 6th inst., has been followed by a further disaster. In the midst of our sorrow, however, there is cause for melancholy satisfaction. The explosion at the Oaks, on Wednesday, Dec. 12, 1866, not only lost us very many excellent miners; it led to the death on the following day, by a second explosion, of that noble band of men whose names shall be again memorialised in these columns thus conspicuously:—Mr. Parkin Jeffcock, mining engineer; Mr. Smith, the underground manager of another colliery; Mr. David Stewart, the underground steward of the Oaks Colliery; William Sugden and Christopher Siddons, deputy viewers; and Thomas Nadin and William Stephenson, firemen.

Last Wednesday a second explosion at the Moss Pits had nearly caused the sacrifice of the lives of—Mr. George Gilroy, of Ince Hall Collieries; Mr. Wm. Bryham and Mr. John Bryham, Rose Bridge; Mr. Peter Higson, Government Inspector; Messrs. John and Jacob Higson, mining engineers; Mr. Elias Dornan, Mr. Alfred Hewlett, Wigan Coal and Iron Company; Mr. Thomas Knowles, Mr. J. E. Pearson, Mr. William Pickard, miners' agent; Mr. W. J. L. Watkins, Pemberton Collieries; Mr. Israel Knowles, the underlookers, and the underground manager, with others. These gentlemen had all deliberated upon the desirability of re-opening the shafts, which, it will be remembered, what has before appeared in the Journal, were sealed down upon its becoming known that the coal had fired after the disaster exactly a fortnight before. After a long consideration of the course to be adopted, it was the unanimous decision of these gentlemen to proceed with the opening of the shafts, as the state of the temperature was a sufficient indication that the fire had been extinguished. The thermometer indicated a general heat of about 70° during the whole of the week, but opposite the mouth of the 9-ft. seam, in which the explosion occurred, there appeared to have been a gradual decrease. The resolution of the gentlemen was not made public, as it was certain to attract a vast crowd to the pit, but the work of uncovering both shafts was proceeded with. At about 4 o'clock a workman, named Shuttleworth, and subsequently one Ashurst, a foreman joiner, were lowered in the downcast shaft to the platform which had formed the covering of the shaft, and from which a very considerable quantity of the puddled clay used for sealing it had been removed. That he might run no risk of falling into the pit a rope had been fastened round his body, and he was also supplied with ropes to attach to the planks, for the purpose of ringing them to the surface.

While they were at work standing at the mouth of the shaft Mr. Pickard, miners' agent, Mr. Israel Knowles, and on and about the bank a number of men were working. At the upcast were Mr. Jacob Higson, Mr. T. Knowles, Mr. John Higson, Mr. J. E. Pearson, and some of the officials. Mr. Jacob Higson had been looking over the mouth of the upcast, which had then been partly opened—for at neither shaft had it been deemed advisable to remove the whole of the covering until there was a better knowledge of the state of matters below—and he remarked to Mr. Thomas Knowles, one of the proprietors of the colliery, that all seemed so quiet below that another descent might be safely attempted shortly. He had scarcely completed his sentence, and he was still looking over the shaft, when he heard a rush of wind from below; this was followed by a long blast of fire, which was in its turn succeeded by a report almost equal to that of a park of artillery. The engineers and officials standing at the mouth of the upcast-shaft were blown a dozen yards on to a railway, and they had hardly time to look round before a dense cloud of smoke issued from the downcast, above which was a sheet of flame, which it is credibly stated rose to a height of from 20 to 30 yards above the head gear. Mr. Higson, the Government Inspector, was at the moment of the explosion walking between the two shafts; he was knocked down, but his injuries were not serious, while on a visit being paid to the downcast it was found that nearly everyone there had been severely hurt, and at least four or five of the workmen employed had been killed. Mr. John Knowles, son of Mr. Thomas Knowles, had his leg broken, and sustained other severe injuries. Mr. Pickard was hurt so badly that he had to proceed home hardly able to walk. Mr. J. E. Pearson, Mr. Jacob Higson, Mr. Thomas Knowles, Mr. John Higson were all severely shaken, and Inspector Dickinson, of the county constabulary, who had been standing near one of the shafts, was so disabled that he could not remain on duty, and had to be conveyed to the police station.

Such was the violence of the explosion that it was heard several miles away, and the sheet of flame was seen distinctly at several places within the borough. Mr. Higson, the Government Inspector, says that it could not have been less than 20 yards higher than the head-gearing of the pit, and that it seemed to shoot out of an immense cloud of dense smoke. The strong woodwork of the platform was broken up like matchwood; the hopper, which had been suspended in the shaft, was blown up and lodged amongst some of the timbers of the head-gear; pieces of wood were blown 30 or 40 yards away, and much injury was done at the mouths of both pits. Ashurst's remains were frightfully mangled, and long after the explosion a lamp, belonging either to him or the man who was found on the side of the engine-house opposite the downcast shaft. The names of the killed cannot be ascertained accurately at the time of writing, for it is feared that some have fallen down the shaft. Ashurst, a married man, with five children, has been blown to pieces. The foreman slaker, Farrimond, is also among the dead. It is feared that the explosion was caused by the existence of a fire in the mine, a point which has been gravely debated during the last week by those who, having friends below, deprecated the sudden closing of the shafts. There cannot now be a doubt that a fire is raging, and that this further accident has been caused by the fresh air being driven on to the fire. The opening of the covering had been very small, for at neither shaft had more than half the covering been taken away. The gentlemen who held the consultation this morning are amongst our most eminent mining engineers, and amongst them there was not a shadow of a doubt from the indications above ground, that all was safe below. When, however, their opinions had had so terrible a refutation, the Government Inspector and the engineers present, together with Mr. Gilroy and others, held a consultation near the pit. We sympathise much with the gentlemen who had again to deliberate under circumstances fraught with so much that was distressing to their feelings as men, and depressing in respect of the uncertainty which even the very best professional judgments are sometimes attended, when they have to be expressed upon those forces of nature so mysterious in their action as the explosive gases in our fossil fuel mines. It has been said, no doubt with all accuracy, that "the conference presented a strange

contrast to that which was held in the morning, and which was attended by the same gentlemen." It was the unanimous opinion that it would be a wanton risk of life to make any attempt to replace the stoppings, and only one other way of extinguishing the fire could be suggested, that was to flood the colliery. Three sources of water supply were at hand—the Leeds and Liverpool Canal, a large brook, and a pumping-pit, which immediately adjoins the colliery where the disaster took place. It was decided to make an attempt to drown out the fire without delay. The leading of pipes was commenced, and men were engaged in placing them in position as the day closed.

A similar course is now, therefore, being pursued in this case as in that of the Low Hall explosion. That accident happened on Nov. 15, 1869, and twenty-eight persons were killed. In order to extinguish the fire the mine was inundated. This was easily accomplished by means of the Liverpool Waterworks, the pipes of which were within a few yards of the pit. The mine took a long time to unwater, and when an entry could be made it was found to have caused numerous and extensive falls of roof. Similar issues may be expected in this case; and as in that case so also in this the engineers we imagine have to find it necessary to wall off the fire. Anyhow we are certain that what can be done will be done; and we earnestly hope that the disaster of Wednesday will give an impetus to the public charity for which an appeal is now being made by the committee formed to administer relief to the sufferers by colliery accidents in South-West Lancashire, who have been doing good service ever since the Hindley Green explosion.

By the latest advices we learn that a fierce fire is burning in the pit; smoke and flames followed the explosion, and the early part of Thursday, which destroyed the head-gear and set fire to the engine-house, whilst all around the mouth of the pit burning wood work was scattered, vomited from the upcast shaft. Great distress and consternation prevail in the neighbourhood.

#### COLLIERY EXPLOSIONS.

The first report, just issued, of a committee formed about three years ago in South-West Lancashire for the purpose of administering relief to sufferers by colliery accidents gives some details as to the aggregate loss of life by reason of the nine great explosions which have occurred since November, 1868, and as to the number of orphans and widows who are or have been dependent on the fund for support. The committee was originally formed to meet the immediate necessities of the sufferers by the Hindley-green explosion in 1868, by which 62 lives were lost, and it was at first intended only to apply to that disaster. Other explosions, however, followed in rapid succession, and each was included in the operation of the fund until at length the names of 148 widows and 349 fatherless children have been placed upon the books of the committee.

The following table, published in the report, gives the names of the collieries where the accidents happened, the date of each disaster, and the number of widows and children whose husbands and fathers lost their lives:—

Place.	Date.	Deaths.	Widows.*	Children.*
Hindley-green	Nov. 26, 1868.	62	22	55
Norley	Dec. 21, 1868.	7	7	26
Haydock	Dec. 30, 1868.	26	—	—
Haydock, 2d explosion	July 21, 1869.	59	41	97
Rainford	Jan. 8 and 10, 1869.	9	6	15
Park Lane	April 1, 1869.	31	13	27
Low Hill	Nov. 15, 1869.	28	13	27
Bryn Hall	Aug. 19, 1870.	29	9	18
Moss Pits	Sept. 6, 1871.	70	37	84
Totals		312	148	349

Surviving sufferers.

Eight of the above were fire-damp explosions, and one was caused by an outburst from a ventilation furnace and falls down a pit shaft. Five of the explosions were in what is known as the Wigan Nine-feet Mine. The report also gives a table showing how the number of cases for relief from each accident has been gradually reduced in proportion to the number of sufferers, and the length of time since the accident. At the close of last month the recipients of relief numbered—widows, 80; children, 179; but the explosion on the 6th inst. has brought up the number of widows to 117, and of children to 263. The total amount of subscriptions received and promised is £8500, of which £5800 has been spent, leaving a balance of £2700. Funds in Bolton and Liverpool amounting to upwards of £2000, make a total of nearly £5000, believed to be available. It is estimated, however, that £1600 will be required to meet the claims upon the committee for the persons already on the books, and £11,900, therefore, remains to be raised.

The report thus concludes:—

"Our committee beg to thank the public of South Lancashire, to whom they are principally indebted for the funds at their disposal, and also all other persons who have subscribed, for the money which has been raised. The late disastrous accident at the Moss Pits will, it is believed, again awaken kindly sympathy. The men were cut off while at work in the very prime of life, and they have left 37 widows and 84 children, who, suddenly bereft of support, require speedy and generous aid. The committee appeal for subscriptions to meet this new emergency, and to continue the necessary relief to the widows and children of those who perished at the previous accidents."

**THE EXPORT COAL TRADE.**—The quantity of coal exported from the United Kingdom in August amounted to 1,267,950 tons, as compared with 1,151,201 tons in August, 1870, and 1,095,839 tons in August, 1869. In these totals the exports to France figured for 183,040 tons, 229,811 tons, and 166,344 tons respectively. The increase in the exports of our coal to Germany in August was very large, the total shipments in that direction having been 259,761 tons, against 19,991 tons in August, 1870, when the German ports were blockaded, to some extent, by a French fleet. The aggregate exports of coal from the United Kingdom to August 31 this year were 8,104,818 tons, against 7,851,174 tons, and 7,017,062 tons respectively. In these totals the exports to Germany figured for 1,603,007 tons, against 1,006,805 tons, and 1,131,778 tons respectively; and those to France for 1,225,149 tons, 1,642,608 tons, and 1,343,584 tons respectively. Our coal exports have increased this year to Russia, Sweden, Germany, Holland, Italy, Brazil, and British India; but they have decreased to Denmark, France, and Spain. The value of the coal exported from the United Kingdom in August was 609,336*l.*, as compared with 564,936*l.* in August, 1870, and 529,658*l.* in August, 1869; and for the eight months ending Aug. 31 this year 3,881,112*l.*, against 3,750,344*l.*, and 3,365,794*l.* respectively.

**THE LATE GUN-COTTON EXPLOSION.**—An announcement has been made by Major HEIGHAM, chief constable of Suffolk, that as the jury appointed to enquire into the circumstances attending the deaths of the victims of the late explosion at the works of the Patent Safety Gun-Cotton Company (Limited) had returned a verdict to the effect that the explosion was the result of some person or persons unknown having added sulphuric acid to the cotton pulp after it had passed all the tests required by the Government, a reward of 100*l.* would be paid to any person who should give such information as should lead to the discovery and conviction of the perpetrator or perpetrators of the outrage. A free pardon is also promised to any accomplice not being the actual offender who may give such information as shall lead to justice being done in the matter.

**LETTERS PATENT.**—The House of Commons Select Committee appointed to enquire into the law and practice and the effect of grants of Letters Patent for inventions left their work unfinished. They reported to the House the evidence they have taken, and this has now been published. The Committee, in a very brief report, recommend their re-appointment next session to continue the enquiry. Mr. Dillwyn proposed to add:—"So far as the enquiry has proceeded, the Committee are convinced, from the evidence already given, that a general feeling of dissatisfaction exists with the administration of the Act of 1852, especially with regard to the conflicting applications for patents, respecting which, during the six months of provisional protection, no information can be obtained. The Committee desire also to draw attention to the various memorials alluded to in the answers to questions 670 to 681, relative to the appointment of additional persons as Commissioners, in accordance with the first section of the Patent Law Amendment Act, 1852, and to other matters. In making this report the Committee do not desire in any way to prejudice the question of the general policy of the continuance of a patent law, or to express an opinion as to any alterations or amendments to it which may be required." This motion, however, was withdrawn; and on the motion of Mr. Hinde Palmer, and by a vote of five against four, the Committee stated, as part of their report—"Without prejudging any question referred to them, that in the meantime it is highly desirable that the powers and provisions of the Patent Law Amendment Act, 1852, should be fully carried into effect."

Prof. Warrington Smyth, F.R.S., has accepted the Presidency of the Royal Geological Society of Cornwall, on its vacation next November by the present respected President, Mr. H. S. Tremenheere, C.B.

**MINING GLOSSARY.**—The third edition of the Glossary of Mining and Smelting Terms has now been printed, and contains carefully compiled lists of the technical terms used in the mines of Cornwall, Derbyshire, South Staffordshire, Newcastle, and Spain; and of the smelting terms used in France and Germany. The book, which will be found extremely valuable to those interested in mines desiring thoroughly to comprehend the agents' reports, will be forwarded from

the Mining Journal office, 26, Fleet-street, E.C., on receipt of 2*s.*, or may be obtained, by order, through any bookseller or newsagent.

#### TRADE OF THE TYNE AND WEAR.

Sept. 21.—The supply of vessels continues large in these rivers, and the exports of coal and iron are on a large scale. There never was a time, perhaps (at any rate, it has not occurred of late years) when such small stocks were held of those staple products; both, indeed, may without exaggeration be said to be *nil*. Increased facilities for shipping coals on the Tyne are now much required, and will shortly be provided. The Tyne Commissioners are providing a shipping place for large steamers on the north side of the river, which will relieve a little the pressure in the Northumberland Dock, and powers to construct a dock at Coble Dean, also on the north side of the river, will shortly be applied for; and this will, perhaps, suffice for the north side of the river for some time to come. But on the south side increased facilities are also much required, and the construction of a new dock, or the enlargement of the Tyne Dock, must be undertaken soon. The Tyne Dock has become a very important import dock, as well as one for exports, and goods are now sent direct from these to all parts of the kingdom. A quantity of Baltic produce is imported, and some of it is sent by rail to Liverpool. Swedish stock, &c., is also sent to Sheffield and Birmingham. The completion of the south side river line, and the opening of the Team Valley line, both very near accomplishment, will materially increase the railway facilities, and give a great impetus to the trade of the district. The coal, engine, and iron trades of the district continue in a most prosperous condition, and all the men engaged are earning good wages. Some partial strikes have occurred, but none of consequence, with the exception of the unhappy engineers. All classes of workmen have had, with few exceptions, their wages increased, and, on the whole, a good feeling continues to prevail.

The Wear collieries are all doing well, and at most of them where large heaps had accumulated those stocks have entirely disappeared, and this alone will ensure full work for the miners for many months to come. As an example of a modern colliery on a large scale, it is hardly possible to point to a more successful one than that at Ryhope; here, although the depth of the seams is great, the first workable one being found at 300 fathoms, the quantity raised daily has now reached 3000 tons. This is raised from two shafts of large size, the winding power, of course, being enormous. This seam, which has turned out so favourably here, is the Maudlin seam of the Wear, or Bensham seam of the Tyne, but it is of great thickness at Ryhope, and other seams lie below, the Hutton seam only having been proved as yet.

The Iron Trade continues extremely good, and the demand for ship-plates and iron of nearly all kinds unabated; the only branch of the iron trade which shows any weakness is the rail trade. The demand for rails is not quite so good as it has been, but as no stocks of any kind are held this is not of much consequence. The demand for coke continues extremely good, and makers have great difficulty in supplying the demands made upon them.

#### REPORT FROM SCOTLAND.

Sept. 20.—Our warrant market, which was dull at the date of my last report, gradually improved on the prospect of another heavy shipping return, and as high as 6*l.* 6*d.* cash and 6*l.* 10*d.* one month were paid on Monday forenoon. These prices were not, however, maintained, although the shipments exceeded the most sanguine expectations, and the closing cash price was on Monday 6*l.* 3*d.*, and on Tuesday 6*l.* 1*d.* To-day the tone was rather dull, and after business at 6*l.* 1*d.* to 6*l.* 1*s.* one month, and 6*l.* 10*d.* to 6*l.* 9*d.* cash, the market closed with sellers at the lower prices, buyers offering 1*d.* per ton less. Shipping brands are quiet and steady, with little or no change to report in prices. The following are the quotations:—

G. M. brands at Glasgow (deliverable alongside).	No. 1.	No. 3.
Gartsherrie ditto	6 <i>l.</i> 6 <i>d.</i>	6 <i>l.</i> 8 <i>d.</i>
Coltness ditto	6 <i>l.</i> 7 <i>d.</i>	6 <i>l.</i> 8 <i>d.</i>
Summerlee ditto	6 <i>l.</i> 7 <i>d.</i>	6 <i>l.</i> 8 <i>d.</i>
Carabrook ditto	6 <i>l.</i> 6 <i>d.</i>	6 <i>l.</i> 8 <i>d.</i>
at Port Dundas		
Langloan ditto	6 <i>l.</i> 5 <i>d.</i>	6 <i>l.</i> 6 <i>d.</i>
Calder ditto	6 <i>l.</i> 7 <i>d.</i>	6 <i>l.</i> 8 <i>d.</i>
Glengarnock at Ardrossan	6 <i>l.</i> 6 <i>d.</i>	6 <i>l.</i> 8 <i>d.</i>
Dalmellington ditto	6 <i>l.</i> 6 <i>d.</i>	6 <i>l.</i> 8 <i>d.</i>
Eglington ditto	6 <i>l.</i> 6 <i>d.</i>	6 <i>l.</i> 8 <i>d.</i>
Carron at Grangemouth	6 <i>l.</i> 6 <i>d.</i>	6 <i>l.</i> 8 <i>d.</i>
Shotts ditto (selected)	6 <i>l.</i> 6 <i>d.</i>	6 <i>l.</i> 8 <i>d.</i>
Kinnell at Boness	6 <i>l.</i> 6 <i>d.</i>	6 <i>l.</i> 8 <i>d.</i>
G. M. brands at Middlesbrough	6 <i>l.</i> 5 <i>d.</i>	6 <i>l.</i> 8 <i>d.</i>
Bar iron	£8 5 0 to £8 10 0	
Nail rods	8 10 0	

For the week ending Sept. 16, 1871	Tons	21,465
Sept. 17, 1870		10,651

Increase since December 25, 1870	10,814
Total increase since December 25, 1870	144,016

At all our Malleable Ironworks there seems no end to the work on hand, but few admit that they are participating in the advanced rates, while paying the higher rate of wages. On some kinds of ship iron the advance has had to be paid, as the orders would not brook delay, but buyers are holding off, and what is given out is given with reluctance. Prices are well held, and on all sides there are more distinct indications of a further advance in price than that of a decline. Mr. Ferrie has taken out a new patent regarding the working of puddling furnaces, and Mr. T. Rowan, chemist, has secured with a patent certain improvements in obtaining steel. In our engineering shops night-work still prevails to a considerable extent. A movement is now afoot to have the system of working overtime abolished in this district, with the view of providing work for those on strike in the Newcastle district. There are also some minor matters in dispute which the trade wish now to have adjusted.

The continued heavy demand for Scotch coal, both for home use and shipment, while it has increased the price of labour is also proving remunerative to the coalmaster; and another advance in wages, as well as a further advance in the price of coal, is expected to take place on the 1st proximo. Indeed, coals are expected to be scarce and high this winter. During the week just ended the shipments of coal from all our ports exceed those of the corresponding week of last year by fully 20,000 tons, the returns for the week this year amounting to 48,029 tons, against 27,644 tons. Mr. Wilson, mineral borer, Armadale, who has been for some time past employed on the estate of Inch, near Bathgate, the property of Mr. J. Waddell, on Wednesday last came on another seam of the famous Houstoun coal. The seam is 4 ft. 6 in. thick, and as it is of excellent quality means for working it will speedily be adopted.

**IRON ORE IN CAITHNESS.**—At a recent bazaar in Thurso, some fine specimens of iron ore were exhibited at the stall presided over by Lady Sinclair, of Murkle. The ore was found on the estate of Sir Robert, her ladyship's husband, and has been pronounced by Prof. Anderson, of Glasgow, to contain first-class hematite iron. While certifying to the quality of the iron and to the large percentage of ore contained, Prof. Anderson expressed doubts as to the ore being found in sufficient quantity to make it a profitable speculation. Recent investigation proves the existence of large deposits, and a sanguine expectation prevails that more will be found to be embedded at a greater depth. Should this expectation be verified, it is the intention of Sir Robert to work the mineral.

**IMPROVED MACHINERY FOR MANUFACTURING GUNPOWDER.**—We understand that Messrs. John Hasle and Co., engineers, Greenock, have contracted with the Lowwood Gunpowder Company, near Ulverston, for the machinery of a new corning or granulating house, embracing many important improvements. The explosion of these houses has hitherto been more destructive to life than any other department in the manufacture of gunpowder. In this house, however, the whole of the machinery will be self-acting; the men, as soon as the powder (in the form of press cake) is placed in the machine, leave the building, and return to a bomb-proof apartment adjoining. There, by means of suitable gearing, the machinery can be started or stopped; and should an explosion take place, they are sheltered from the effects of it.

**GLASGOW STREET TRAMWAY.**—The contract for this important undertaking, the operations connected with which are to be begun forthwith, has been secured at the sum of £8,700*l.* 6*s.* 8*d.*, by Messrs. Charles Brand and Son, Camnock, with the condition that Messrs. Brand supply and execute the whole paving work. The rails are to be laid on bituminous concrete, and are to weigh 60 lbs. per lineal yard. They are to be attached to longitudinal beams of American white oak, resting upon transverse sleepers of the best Baltic timber. The timber is being crosscut, the nuts are to be galvanised, and the surface of the oak, and all bolts, spikes, and oak pin-holes, are to be thoroughly saturated with Archangel tar at the boiling point. They are to be worked by a limited liability company, with a minimum capital of 200,000*l.*, to which they have been let by



the Corporation for the period of 20 years, in return for a certain rent in the shape of interest, and an obligation on the part of the company to maintain in good repair the portion of the streets which they occupy.

**CLYDE SHIPWRIGHTS.**—The Clyde Shipbuilding and Engineers' Association, at a meeting held in Glasgow yesterday, taking into consideration the continuance of the carpenters' strike in the Glasgow district, notwithstanding the advance of wages offered, while at Greenock and other places they are at work, and that such a condition of matters is likely to prolong the strike in the Glasgow district, was unanimously of opinion that a lock-out of all the carpenters on the Clyde should take place in the event of a continuance of the strike.

**THE SCOTCH LABOUR MARKET, AND STRIKES.**—The plague of strikes, like the Egyptian plagues, is overrunning the land, and is getting about as offensive to the whole community. The modern employees will not now content themselves unless they can borrow from their "hard taskmasters" their jewels of silver and their jewels of gold. Not that they have had to make their bricks without straw, for the frugal amongst them have prospered surprisingly, but only they think it wise of them—

"To turn their grumbling heads away,  
And quarrel with their feed of hay,  
Because it is not clover."

Throughout Scotland there are strikes, or threatened strikes, amongst all classes of tradesmen. Shoemakers, weavers, scavengers, printers, railwaymen of various grades, moulders, engineers, shipwrights, miners, &c., are all making some move for increased pay; so that with regard to the temple of labour, "the posts are being moved, and the house is being filled with smoke," and there seems to be no immediate signs of deliverance from this confusion. The working men allege that they have not sufficient time to cultivate their mental faculties; but are employers of labour, or is labour itself, to bear the burden of training the working classes into semi-philosophers? The working men complain that they do not receive a sufficient share of the profits of labour, but are they to prescribe what that share is to be in the future, or abstain from working altogether? The labour temple is filled with smoke, and although men can only be seen through the haze, like trees walking, the men seem quite content to look at matters through the blinding smoke. Clear the temple of the smoke, and in the light parties interested will then see clearly.

#### REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

**Sept. 21.**—The North Staffordshire ironmasters have advanced puddlers' wages 1s. per ton, and millmen's wages 10 per cent., with a proportionate advance in the price of finished iron. It was stated at the meeting that this advance is greatly in favour of the men, and to the disadvantage of the masters, the latter having on their books orders at former prices, which would take a considerable time to work off. The price of pig-iron is firmer, owing to the recent increase in miners' wages, and the consequent enhanced value of ironstone and fuel. Contracts for pig-iron for forward delivery have been made at an advance of 5s. to 7s. 6d. per ton. Furnaced ironstone is selling at 11s. 6d. to 12s. 6d. per ton, loaded in horse or truck, and at these figures the supply is unequal to the demand. Chalky mine and clay-banded stones range from 11s. 6d. to 13s. per ton. Coal and slack are in satisfactory request, at improved quotations.

The Coal Trade of South Staffordshire is in very fairly sustained activity, and quotations have an upward tendency. In the Cannock Chase district mining operations are especially brisk, and the new mines being opened out will afford employment to a large number of additional men. "The Fair Oaks Colliery Company" (Limited) is the title of a new enterprise which has been launched, with the view of leasing from the Marquis of Anglesey, and developing a large tract of mineral producing in the Cannock and Rugley districts. In the neighbourhood of West Bromwich several partially-worked collieries, which have for some years been water-logged, are being opened out, extensive pumping apparatus being set down with the view of effectually draining the workings. Ironstones in this district are in active request, and the supply of native ore is extremely limited. A meeting of coalmasters will be held shortly, to determine what course shall be adopted on the wages question, an advance being almost inevitable after the recent concessions in the iron trade, and the example set by coal and iron masters of North Staffordshire.

The South Staffordshire Iron Trade has been all the week in a very unsettled state, owing to the uncertainty which prevails as to the course likely to be taken on the question of prices. The pig-iron makers have no lack of orders, and the only restriction to further business is the unwillingness of producers to book contracts for forward delivery at existing quotations. Several additional furnaces in this district will be put into blast during the ensuing quarter. The market for finished iron has been considerably influenced by the advance declared in prices by the ironmasters in the northern part of the county. It is regarded as almost certain that an advance will be declared at the Preliminary Meeting, to be held in Birmingham, next Thursday. Many of the ironmasters, however, are of opinion that the prevailing agitation of the millmen is uncalled for, and unjustified by the circumstances of the case. A leading ironmaster assures us that at the present rate of wages the millmen can earn 12s. per day, while the puddler, who employs equal skill, works equal hours, and endures much greater fatigue, can only realize about half that sum, even with the concession recently made by the masters. In the event of iron being advanced in price, however, a proportionate rise in wages will be inevitable. The orders for finished iron, now in course of execution, comprise bars, hoops, strips, squares, small rounds, boiler plates, angles, nail rods, &c., and the mills and forges throughout the district are in full activity. It is, however, remarked that since the advance in price, declared three weeks ago, orders have not been coming in quite so freely as before, and it is feared by many that the declaration of a further rise will considerably check the prevailing prosperity, by diverting large orders to other centres of production.

There is no falling off in the demand for machine castings at the Black Country Iron-foundries. Many of them are from the North of England iron districts, but a fair number are on account of Russia and other foreign markets. Messrs. Perry and Son, Highfield Foundry, Bilston, have just completed for Russia a vertical engine, with two trams of rolls, and they are now constructing for the same market a vertical engine and forge tram, and a pair of horizontal engines, with a rail tram and reversing gear, the whole of the work being of a very strong, massive character. Considerable activity prevails at the engineering establishments at Wednesbury, the demand comprising all classes of iron-work connected with railway plant, and rolling stock. The wrought railers at the East Worcestershire district are agitating for a 10 per cent. advance in prices, and a meeting has been called for next Monday to consider the reply of the factors to their application, and finally to decide the course to be adopted. It is generally understood the factors will refuse the application for a 10 per cent. advance, but will offer to compromise the matter by granting 5 per cent. The men resolutely declare that unless they get the full advance asked they will leave off working.

#### REPORT FROM DERBYSHIRE AND YORKSHIRE.

**Sept. 21.**—There is a good deal of activity at several of the iron-works in Derbyshire, more especially in foundry material. Amongst the articles most in request are pipes for water, and gas tanks and girders. In Derby the establishments have been doing very well for some time, and the prospects of the trade continuing so are in every way most encouraging. Close to the station the Midland and Yorkshire Coal and Wagon Company are building a large place for the making of wagons, their own requirements being considerable, seeing that they are now sending a very heavy tonnage of coal over the Midland, Great Western, and London and North-Western Railways, holding the appointment of agents on those lines for the coals and coke of Messrs. Newton, Chambers, and Co., of Thorncliffe and Chapelton. The works on the Erewash Valley line of railway are doing a steady, and in some instances, a brisk trade. Messrs. James Oakes and Co. are busy in pipes and other castings, and have two furnaces in blast, and a third nearly ready for blowing in. A rather large tonnage of Northamptonshire ore is being imported, and a reciprocal trade in ore and coal and coke is being done.

Lead mining has undergone but little change of late, the yield being of fully an average character, but with better railway facilities, which there is some prospect of being provided, there is little doubt but a considerable increase would be assured. Many of the districts, such as Eyam, Castletown, &c., are entirely removed from railway intercourse. In the neighbourhood of Wirksworth, however, a good deal of lead has been obtained. Messrs. Wess and Co., being the principal persons engaged in the trade. In connection with the old Roman town of Wirksworth, for long ages the centre and capital of the Derbyshire lead district, it may be stated that the foundation stone of a new Town Hall was laid a few days since with full masonic orders by Captain Arkwright, M.P.

The trades of Sheffield are without much change, the heavy branches being still busy, and the lighter ones in a tolerably satisfactory state. Heavy plates are being largely produced, and there is still a brisk demand for railway material of every description, including rails, poles, springs, wheels, and axles. Bessemer steel in all forms has been in brisk request, and makers have had a long and busy season. In the Rotherham district the manufacturers are fairly off for orders, the foundries, as a rule, being very well employed.

The business doing in steam coal from the leading collieries in South Yorkshire has been large, and a good deal is being sent to Grimsby for shipment to Russian ports, as it is not expected that more than another voyage to the higher Baltic ports will be made this season. To Hull, also, the trade has been very fair, whilst the tonnage sent to London has been considerably greater than usual for the period of the year. House coal is beginning to move more freely, and there is also a little more doing in engine fuel.

The South Yorkshire Miners' Association has taken up the question of an advance of wages, and in a manner more than usually agreeable. The men at the different collieries have sent a circular to their employers asking for an advance to the extent of 6 per cent. They base their claims to the concession on the ground that some two or three years since, when the trade was in a very depressed state, they submitted to a reduction of 5 per cent., and now that business is exceptionally good they asked to be paid at the former rate. A

meeting of the coalowners will be held in a few days, for the purpose of considering the application made by the men. There is, however, every reason to believe that there will be no interruption to trade, or to the kindly relations at present existing between masters and men.

**BREACH OF THE MINES REGULATION ACT.**—Joah Chambers, of Shepley, near Huddersfield, executor of the late Mr. Henry Ellis, owner of the Kirkstiles Colliery, was summoned by Mr. Wardell, Inspector of Mines, before the county magistrates, at Huddersfield, on the charges of neglecting to provide an adequate amount of ventilation in his colliery, and of employing a boy therein under 10 years of age. Robert Kilner, the underground steward of the mine, was also charged with having on June 28 neglected to inspect the mine before any person was allowed to enter it. Mr. Arncliffe, for the defendants, pleaded guilty. Mr. North, of Wakefield, the prosecuting attorney, stated that on June 28 a collier named Rawnsley was allowed to go down the pit before it had been inspected by Kilner, and he died in consequence of the foul state of the mine, due to imperfect ventilation. Another man narrowly escaped the same fate. The next day the Inspector, coming to the mine to enquire into the occurrence, found that there was employed in the pit a lad under nine years of age. The magistrates fined Kilner 20s. and costs, 11s. 18s.; and Chambers 20s. and costs, 11s. 18s., in the first case, and 5s. and costs, 5s. 18s., in the second case.

#### REPORT FROM MONMOUTH AND SOUTH WALES.

**Sept. 21.**—The Iron Trade is not, in this district at least, attended with the activity usually witnessed at the close of a quarter. A few fresh orders have been booked during the past week; but as compared with the usual transactions, they must be pronounced as small and unimportant. The Quarterly Meetings of the ironmasters are looked forward to with considerable anxiety, as they will be called upon to decide two very important questions—what values shall be fixed upon the materials produced, and what rate of remuneration shall be paid to the men who produce them. The men have evidently made up their minds, not only in this but in other districts, to appeal for an advance in their wages, and they will, no doubt, continue their demand until it is in some measure acceded to. It would be a pity to see the growth of the trade stunted by systematic disagreements between the employers and the employed, and it would be disastrous if it were stepped altogether by a general strike. It is to be hoped that such will not be the case, and it is not unlikely that if the men do not persist in unreasonable demands the masters will be disposed to make some concessions. It is pretty clear, however, that an advance cannot well take place in the rate of wages paid unless a proportionate rise be made in the prices of finished iron, especially as raw materials are being continually enhanced in value. Buyers would be likely, of course, to offer objection to a general advance, but from what is to be seen at present they could not offer any formidable opposition to the course. The make for some time has not exceeded the requirements of consumers, and the result is that there are little or no stocks in the hands of sellers or buyers. Adding to this the many and vast undertakings which are being carried out in the United States, Russia, and various parts of Europe, one cannot help concluding that a very large demand must be kept up if those undertakings are to be completed, and there is really little ground for believing that purchases can be restricted to any material extent. It is expected that home purchases for railway iron, bars, and plates will continue on an active scale. Pig-iron and iron ore are still imported into the district in considerable quantities. Much about the same degree of activity is to be witnessed in the Tin-Plate manufacture, and in all probability there is a long future of prosperity before the trade.

But slow progress is being made in the Steam Coal Trade. At the commencement of the week it was feared that some difficulty would be experienced in keeping the collieries at work, as reports were circulated that some serious differences had arisen between the old and new hands. In the neighbourhood of Ferndale, and other parts of the Rhondda Valley, there was undoubtedly considerable agitation among the men, owing to some one or two rather serious disturbances which had taken place in the previous week, but, as is usual in such cases, the rumours current were exaggerated very much. Since then matters have been somewhat more settled, and larger quantities of coal are being raised at the principal collieries. Still the output is not equal to what was expected to be by this time, and it is feared that some time will elapse before the working of the collieries will be carried on with the wonted regularity. Preparations are being made on both sides to commence the arbitration by which will be decided the future scale of wages to be paid. But, as mentioned last week, the men in certain localities seem to entertain a belief that the masters have not a sincere desire to carry out the arbitration. This erroneous notion has no foundation whatever, as the masters are only fortifying themselves with the necessary evidence to place before the arbitrators, and are in no wise desirous to prevent the arbitration being proceeded with; on the contrary, they are obtaining a declaration as soon as possible in order to put an end to any pretence for further agitation. As to the position of the trade there is little new to report. A much larger business might, no doubt, be done if the output were larger, and colliery proprietors were in a position to quote more reasonable prices. For house coals there is an increasing enquiry, as is usual in the autumn, and current prices are obtained without difficulty.

Agitation is commencing in the ironworks collieries for an advance in wages. Some of the colliers employed by the Plymouth Iron Company held a meeting this week, and resolved upon making an immediate application for a rise of 10 per cent. in their wages. The opinion prevailed amongst the men that with the prices now obtained for coals it would be an easy matter for the masters to grant the advance asked for.

Further instalments have been paid by the Union to the men who were on strike. The last division was made a few days ago, being this time amongst the children of the turn-out only. During the strike the association was unable to pay anything extra to the men who had families, and the married men received no more than single ones. The total number of children who now claimed was 7210, including 4928 in the Aberdare district, 329 in the New Tredegar, and 1953 in the Rhondda Valley. The sum distributed amongst them was 6731. 18s. 6d., being at the rate of 1s. 10d. per child. The amount received by each man during the strike, which lasted twelve weeks, was 17s. 8d. 7d. each.

The death occurred on Tuesday this week of Mr. Rowland Fothergill, who has for some time been a partner in the Tredegar Iron Company. The deceased gentleman, who was born in 1793 was for more than half a century actively connected with the iron and coal trades of this district. He was a native of Mr. R. Fothergill, M.P., one of the leading iron and coal masters in South Wales.

The arrivals at Swansea include—the Aline, from Caldera, with 735 tons of copper regulus, for H. Bath and Son; Cubana, from Carrizal, with 690 tons of regulus, and 160 tons of argentiferous lead, for H. Bath and Son; Paulo Revello, from Sistría, with 800 tons of copper ore, for H. Bath and Son; Pro Trm, from Bilbao, with 500 tons of iron ore, for H. Bath and Son; Rebe, from Bilbao, with 400 tons of iron ore, for H. Bath and Son; Zlon Hill, from Drammen, with 180 tons of zinc ore, for Messrs. Dillwyn and Co.; Empire, from Bilbao, with 364 tons of iron ore, for the Dowlais Iron Company; Atlantic, from Bona, with 180 tons of iron ore, for Messrs. F. Trevelyan and Co.; Joseph Maillie, from Bilbao, with 137 tons of iron ore, for Aberdare Iron Co.; Fernand George, from Antwerp, with 90 tons of fire-clay, for H. Bath and Son.

**NEVADA.**—The *Eureka Sentinel* of August 16 says:—"That the Eureka Consolidated furnaces for the 24 hours ending the day previous turned out 18 tons of bullion, which assayed \$455 per ton, making the gross yield for the 24 hours \$8190. No. 4 furnace has been running 11 weeks without repair, and No. 5 nine weeks, and to all appearances is as perfect as when the fire was applied. A dividend of \$1 per share was declared for the month of July, amounting to 10,000." The Richmond Consolidated, with its one furnace, is producing bullion in proportion, and of equally as high grade as the Eureka Consolidated, and when the new furnaces now in process of erection are finished the dividends will be equally as large, if not greater, as the Richmond will have the advantage of refining their own bullion at their own works, thereby saving the cost and delay of shipping it in bulk to San Francisco or Omaha for refining. The August shipment of bullion from the Raymond and Ely Meadow Valley and Pioche Mines was \$400,000. This district is likely to prove one of the most formidable rivals to the mines on the Comstock lode, which at the depth of 1200 feet is opening up deposits of marvellous riches. The Crown Point, which has just reached that depth, is now selling in San Francisco at \$305 per share, there being but 600 feet, divided into 12,000 shares, in the mine; this is at the rate of \$6100 per foot, or \$3,660,000 for the whole mine. Last February the shares in this company were selling for \$6 per share, and the Raymond and Ely, which was selling for \$21 per share on Aug. 31, is now selling at \$65, an advance of over 100 per cent. in 22 days. The Kentucky Mine, which was offered in this market four years since for \$300,000, has since paid dividends amounting to the sum of \$1,252,000.

**UTAH.**—During the week the shares of this company, in consequence of the continued proof of the resources of the mines, and of orders from the other side of the Atlantic, have advanced to 77. 10s. prem. Capt. Nancarrow's last report is to the effect that the present furnace is working successfully, that the 50-ton furnace will soon be running, and that there is ore enough in sight to supply any practicable number of furnaces. These mines will, beyond doubt, equal the great success of the Emma Mine, in the same territory, and now paying 500,000. sterling annually in clear profit dividends. The following is from the *Salt Lake Herald*, of Aug. 29:—

"HANDSOME SPECIMEN."—There is a very handsome specimen of galena ore, mixed with pyrites of iron, from the Utah company's mines, Bingham canon, to be seen in the office of the Ely Tunnel Company. This is the mine that was purchased some time ago by an English company, from Bateman, Ruel, and Co., and with which our British friends are apparently very well satisfied, though some western experts pronounced less favourably with regard to it than the English experts did, results so far having fully sustained the judgment of the latter."

**PINTO MINING COMPANY.**—Two gentlemen of London, who are largely interested in the mine, arrived by stage on Thursday, in company with Mr. Partridge, and made a thorough inspection of the property and work going on. They express themselves highly pleased with the condition of the mines and prospects. To the great success of the Eureka Consolidated property,

known in England as the Buckeye and Champion, we may soon add others of no less importance. The mines simply need vigorous working in this particular case. The Pinto has proved what may be promptly and well done. By immediate transmission of funds, a contract was entered into for the erection of a mill and rolling furnace, on the day the company took possession, and work started in the mines. The result will be that by the middle of November both mill and ore will be ready. The tunnel has been run 210 ft., and the Michigan and Mountain Chief Mines well opened. In one of these the ledge is estimated 300 feet, and shows a continuous vein of fine ore. This body of ore is estimated, even to Mr. Partridge, who owned the mine before the Pinto Company came into possession. The mill and furnace contractors are under bonds to complete their work by Nov. 15. The Pinto Company can congratulate themselves on having secured the services of Captain Plater, a gentleman of prompt business habits, competency unquestioned, and character irreproachable. His own interests near Eureka will stimulate him to make the Pinto a great success, and in this operation we see the beginning of a lucrative business for the latter. —*Eureka Sentinel*, Aug. 29.

#### [ADVERTISEMENT.]

#### THE QUEEN, THE KING, AND THE VIRTUOUS LADY.

SIR,—I am not disposed to quarrel with a shadow, or answer the letters of anonymous scribbles. Shareholders, one and all, are invited to attend the meeting on Saturday, the 30th inst., which will be held in the neighbourhood of the three mines, at the Bedford Hotel, Tavistock, to enable those who have an interest in the properties of seeing and judging for themselves; and my sincere wish is for any and all defects, as well as effects, to be laid before the shareholders, so that, if possible, the former can be remedied. I have received several letters from parties who cannot attend the meetings, and am anxious that I will give my word of honour that ore containing 10 ozs. of silver to the ton can be worked at a profit. It requires very little shrewdness to detect that these letters emanate from one source or chief channel. I cannot vouch for the accuracy of the statements made by Messrs. Knott and Doble, but, believing them to be honest and sincere, they have my confidence; and if any mistake is made, and the result should be a failure, my very all is invested in these three mines, and instead of the fortune I have already put down as certain to come to me in the course of time my portion will be extracted at 50 to 80 per cent. profit, irrespective of the share of the profits, which will be as much as the rest of the shareholders, and, having taken up one-third of the new issue of capital (5000 shares at 11s. each), my stake is by far the largest. The following is a copy of a letter signed by Messrs. Knott and Doble. I have the original, and have taken this precaution that they may have all the honour with a success, and share a little of the abuse I am convinced would be lavished upon me if a failure:—

Sept. 20.—From practical working upon a small scale we are prepared to, and do hereby, certify that the mineral substance upon the Queen and King Mines, containing as little as 8 to 10 ozs. of silver to the ton of stuff, can be by the process used by us at these mines be extracted at 50 to 80 per cent. profit, irrespective of the products, upon which we will speak more decidedly in short time, when certain experiments we have now in hand are fully carried out. This is apart from arsenic, tin, or copper, which would, of course, be a separate matter, and an additional profit. There are thousands of tons already upon the surface of low-class silver ore at the King and Queen Mines, and motive power, number of heads of stamps and revolving barrels (with other very inexpensive matters used in the process) will entirely govern the return of silver. We can supply you with 500, 1000, or 10,000 ozs. of silver per month at the profit named in the above, and the silver will be delivered to you in any form you may require, and put men at work to open up the ground in an extensive way; but it will, of course, take time to put up machinery, &c., to return so much as 10,000 ozs. per month, and open up ground to continue to supply such large quantities of low-class ores. Having just extracted some bars of silver from a number of tons, the pile of which did not contain more than 7 ozs. to the ton, we ought to know what we are about, especially as this is not our first, second, or third successful trial upon the lowest class silver ores that we could find in the mine, and, therefore, prepared to express our willingness for you to make, as per your request, any use of this letter, as you may feel disposed.—W. KNOTT, J. W. DOBLE.

By the tone of this letter it is clear that all we want is time, for, as regards very extensive works, we can go in quietly at first, and increase our machinery and returns out of a portion of the profits; and the Queen and King Mines have yet some 4000l. cash each to assist as the calls become due. Time is wanted. The Mont Cenis Tunnel was not made in a year, but some 13 years have elapsed since the task, although thousands laughed at the very idea when the subject was first discussed, shall be at the Queen Mine, as under, until the 30th inst., where any important letters should be addressed to me.

THOMAS J. BARNARD,  
Queen Mine, Harrowbarrow, St. Mellion, Cornwall, Sept. 21.

#### THE VIRTUOUS LADY, AND THE QUEEN.

SIR,—Your correspondent, signing himself "Another Shareholder," having made some remarks on my communication of September 9, I beg you will in the interest of scientific mining give me an opportunity of replying. The amalgamation process for the extraction of silver from low-class ores may be thus briefly described. The ore is crushed to powder, mixed with a quantity of common salt, and roasted at a low heat, thus converting any sulphurets of silver it may contain into chloride. The resulting mixture, containing besides the chloride of silver, oxide of iron, copper, soluble salt, &c., is put into barrels made to revolve on an axis with water and scraps of iron. This reduces the chloride of silver to the state of metal. Quicksilver is then introduced, and the amalgam repeated, the mercury dissolves out the silver forming an amalgam. This amalgam is strained through linen cloth, or some such substance, and the solid residue, exposed to heat, by which the remaining portion of the mercury is volatilised, and the silver left behind is an impure state.

Such, I believe, is the amalgamation process, as described by our scientific writers on chemistry, as applied to the arts. On this superstructure is built the various processes which scientific men have from time to time discovered and utilised, each of which have their own speciality, their merits, and no doubt their demerits. I may mention an American invention—the Bruckner system of revolving cylinders, which has been noticed in the *Mining Journal*, and has, I believe, in some instances, in the Pacific States superseded the celebrated Sigsbee's furnace.

"Another Shareholder" doubts the economic application of the process patented by Mr. Doble. I have before me a paper read before the meeting of the British Association, held at Liverpool, by Mr. J. H. Phillips, "On Claude's Process for the Extraction of Silver." Without going into chemical details, Mr. Phillips states that 1/2 oz. of silver and 3 grs. of gold may be extracted from each ton of ore at an expense of 8d. per ton, giving a net profit of 2s. 6d. per ton. This has been practically carried out at the Widals Mines Works, and is the result of nearly eight months' experience in working. This fact was noticed at the time in the *Journal*, but I cannot lay my hand just now on the number so as to give the details.

Mr. "Brother Shareholder" concludes his letter by saying, "My kind regards to a friend of Mr. Barnard." Now, the fact is I have only seen that gentleman three times in my life, twice at public meetings, and once at his office alone.—*Kettering*, Sept. 20. A WAITING SHAREHOLDER.

[For remainder of Original Correspondence see this day's Supplement.]

#### [ADVERTISEMENT.]

**From Mr. JAMES CROFTS.**—The continued firmness of the tin market has been reflecting in a marked manner upon the Mining Market, and it is not surprising to find tin stocks commanding great prices in the county. Investors. Looking over the lists of the most prominent mines in the county, it will be found that at no time have prices shown such a high average. The high range of quotations in the tin market have, of course, occasioned the opening of many new mines, and it is very satisfactory to note the success that has attended the adventures. Prominent amongst the young tin mines of Cornwall is one that has lately entered the Dividend List, and is now making regular returns, with steadily increasing profits. The mine is called the "CASTLE OF BUX," is situated near St. Columb, is conducted under the Limited Liability Act, and is divided into 5000 shares at 20s. each, and at present prices, so that there is no liability. The mine is in full work, and, as the writer has already stated, profitably. A minimum dividend of 10 per cent. is guaranteed for three years from January, 1871, but it is expected that a much larger dividend will be earned; indeed, when the new winding-engine, which is now in course of erection, is completed, the returns will be at once greatly increased. The machinery, which cost a large amount of money, is very complete, and is sufficient to meet all requirements. To illustrate the capabilities of the mine, we may mention that from one pit alone, when the property was in other hands, upwards of 10,000l. worth of tin was raised, which at present prices would be worth more than 13,000l. The merits of the property are such that no enquiry is needed, but the writer would simply state that amongst the great advantages offered to investors may be mentioned—1, that the mine is in full work, making returns of tin, and a most favourable market for the produce; 2, the machinery is erected at great cost, and is all paid for; 3, the tin itself is rich, and practically inexhaustible; 4, after paying for the share, there is no further liability of any shape. Here investors have a mine which appears for itself. Tangible results have been arrived at, and with increasing returns may rise any day and at any price, especially as the prospect of the north lode is so near, and a rich bunch expected, from the indications. At KROON CONSOLS the stamps have been set to work, so that sales of tin will soon commence. The new lode in the engine-shaft, which has been cut for 100 feet, the meeting on the 13th, continues to yield excellently. This lode had been seen in the sett before it was cut in the shaft, so that the discovery was quite unexpected, and has added greatly to the value of the mine; 5, the practical men who have visited the property state that the present discoveries are sufficient to warrant a high price for the shares. The rise is certain to come.

**RUSSELL (Silver-lead).**—Two argentiferous lead lodes or veins traverse this extensive site 20 fathoms apart, and underlying towards each other. They will make a junction at about 50 fathoms from the surface—a most important feature. These lodes are named respectively the Great North Lode and the South Lode. The Great North Lode, fully 10 ft. wide, has been driven on to the 10 ft. level; it is composed of gossan in large quantities, fluo-carbonate, and carbonate of lime, all strongly impregnated with lead ore and 1 scarabaceous, and has produced so large lumps of silver-lead from 7 to 20 lbs. each. The South Lode has been driven on to the 30 ft. level only; it is from 3 to 10 ft. wide, composed of fluo-carbonate, quartz, white iron, blende, and has produced small stones and small branches of lead ore the entire length of the lode; at one point it will yield a few cwt. of silver-lead ore to the fathom.



**THE NEW HINGSTON TIN MINING COMPANY (LIMITED).**

In 12,800 shares of £1 each.

The following statements may be relied on, viz.:-

- 1.—The deeds of the property, including the whole of East Kitt Hill sett, are in the hands of the company.
- 2.—The whole of the works are in such an advanced position as to require but a short time for large returns.
- 3.—The lode is an extraordinary rich one for tin, as proved by former sales and present assays of ore—nearly one mile in length being owned by the company.
- 4.—This lode, on the eastern boundary of the sett in Hingston Down, is worth £120 per fathom.
- 5.—This lode, on its western boundary, in South Kitt Hill (worked by private parties), has produced about 40 tons of tin above the 9 ft. level, that being the greatest depth of the mine.
- 6.—There will be an available capital of £6400 for the machinery, &c., if required, for the starting of the new company.
- 7.—Persons best acquainted with the mine believe that large and continuous dividends will very speedily be made, as evidenced by the proprietors taking shares instead of cash for the mine.

Applications for the remaining shares to be made of the Secretary, Mr. GEORGE MADGE, at the offices of the company, 3, Crown-chambers, Threadneedle-street, London, E.C.

**THE CASTLE GATE TIN MINING COMPANY (LIMITED).**

Capital, £10,000, in 1000 shares, limited to £10 each.

The first payment is £2 per share, which must be made on application for shares, and no call will be made before the expiration of three months from this date.

Taking into consideration that large returns of tin can be immediately made, it is not thought that more than £5 per share will be required to be called up. Priority of allotment will be given to applicants desirous to pay up in full, and dividends will be paid *pro rata* on the amounts paid.

Directors.—DR. THOMAS PHILBRICK, College Road, Brighton.

CAPTAIN H. BULKLEY, late H. M. A.

CAPTAIN G. BRAMISH, Corinthian Club.

DR. WM. MORGAN, Tyndall Place, Islington.

JOHN NEWCOMB, Esq., Westmoreland Road, Baywater.

BANKERS.—THE CONSOLIDATED BANK (LIMITED), 32, Threadneedle Street.

THE SOUTH CORNWALL BANKING COMPANY, St. Austell, Cornwall.

Messrs. EVANS, LAING, AND EAGLES, 10, John Street, Bedford Row.

BROKERS.—THE LONDON STOCK AND SHARE AGENCY, 165, Strand, London.

SECRETARY (pro tem).—JOHN FOX FARRIDGE, Esq., 3, Winchester Buildings, City.

OFFICES.—3, WINCHESTER BUILDINGS, LONDON, E.C.

ABRIDGED PROSPECTUS.

This extensive tin mining sett is held under licence from the Duchy of Cornwall (Prince of Wales) for 21 years, at a royalty of 1-18th due on all ores sold. The mine is situated in the parish of St. Columb, on the side of a hill, and the surface working has been of a most extensive and extraordinary character by the ancient and modern workings, at remarkably shallow levels, immense profits have been realised.

The following are reasons why the mine can be recommended:-

- 1.—It is on a hill, and can be worked without expensive sinking for several years.
- 2.—It is a rich tin-bearing elvan, which has made such great deposits in all similar mines.
- 3.—There are thousands of tons of paying tinstuff already laid open to view, and only require stamping to make marketable.
- 4.—There being but 1000 shares in the company, and the amount of capital being small, the dividends will be proportionately large.
- 5.—There are over 20 lodes of tin, besides the elvan, which can be worked now on surface at a very small cost.
- 6.—It is capable of making such large returns of tin that dividends must result in a few months from the present time, thus avoiding the great delay and anxiety so frequently met with in the re-working of old abandoned and deep mines.
- 7.—The mine is now at work, therefore shareholders will enter a going concern. Prospects and forms of application for shares, and detailed agents' reports, may be had of the Secretary, Brokers, or Bankers of the company. As considerably more than half the capital has been privately subscribed for, early application for shares is necessary to secure an allotment.

London, September 15, 1871.

**LYNOLYS LEAD AND COPPER MINING COMPANY (LIMITED).**

To be incorporated under the Companies Acts, 1862 and 1867.

Capital £12,000, in 12,000 shares of £1 each.

5s. on application, and 5s. on allotment.

Calls not to exceed 2s. 6d. per share, and not to be made at intervals of less than three months.

Directors.—To be chosen at the first general meeting of subscribers for shares. BANKERS.—Messrs. ROOKE, EYTON, AND Co., Shrewsbury.

SOLICITORS.—Messrs. HENRY MORRIS, Pontefract.

SECRETARY.—Mr. H. J. BADDELEY, Pontefract.

OFFICES.—SWAN HILL, SHREWSBURY.

PROSPECTUS.

The company is being formed with the object of working the lead, copper, and other minerals under land situate at Lynolys, near Oswestry, Salop.

The area of the land under which the right to work has been reserved is about 100 acres.

The property is most conveniently situated in proximity to the Lynolys Station on the Cambrian Railway System, and a peculiar feature in it is that adit levels can be driven, and the mines worked to a very considerable extent, without the aid of steam power, thereby enabling the company to further test and develop the property at a very moderate expense.

The value of the property for mining purposes has been ascertained by operations carried on for some months, which have proved the existence of five large well characterised mineral lodes of lead, copper, &c., and a bed of oxide of iron. The promoters have had the property examined and reported upon by competent judges, and they append some of the reports.

It may be added that, in addition to the presence of lead, copper, &c., the geological formation of the property is limestone, offering an opportunity for obtaining stone for fluxing purposes, and for converting into lime.

In the allotment of shares preference will be given to those applicants who desire to pay up in full on allotment.

No allotment be made, the deposit will be returned in full at an early date, without deduction.

Application for shares may be made in the form accompanying the prospectus, addressed to the Solicitor or Secretary.

Shrewsbury, August 21, 1871.

REPORTS.

Aug. 5.—At your request I have carefully inspected the above mine, and beg to send you my report thereon. The property is situated near Oswestry, in the county of Salop, and comprises a good tract of ground; its geological formation is limestone, through which five known large and well-defined lodes traverse, the hitherto operations have been confined principally to two lodes—namely, the south or Ranters lode, and the north and south lode. On Ranters lode, which is bearing near east and west, several pits have been sunk to a depth from 10 to 16 yards, and small drivages made for over 100 yards in length, and for the whole distance I find the lode to contain good stones of lead ore, where good pits are now lying at surface, which have been broken in the several pits and drifts.

A more promising and encouraging lode cannot be seen so shallow, and I firmly believe, depth is the only thing required to prove this remunerative. This will form a junction with the lode lying passing through the sett. There is also a north and south lode, discovered by sinking a shaft which is 25 yards deep, where large stones of copper and carbonates have been broken. In addition to these lodes there is a bed of oxide of iron running through the sett, which is 4 feet thick, and from 15 to 20 yards wide, which can be sent from the mine at a good profit, being close at surface and in proximity to the railway station. I beg to remark that two adit levels can be taken up at the foot of the hills, one on the south or Ranters lode, and the other on the north or south lode, and I think that both would come in 80 yards deep on top of the hill where they will form a junction, which I look at as a very favourable feature, and the limestone can be saved for burning and other purposes.

In conclusion, allow me to say, I consider you have a property of no small value, and where a vast amount of work can be done without the aid of steam-power, and looking at the several favourable features which the property presents, the prospects are such as to warrant a vigorous prosecution, when I think a small amount likely to bring it into a profitable position.

JAMES NANCARROW.

August 6, 1871.—This sett is situated near Oswestry, in the county of Salop, and comprises a large tract of ground. There are several well-defined mineral lodes opened out, and lead and copper ores broken in all. I may note two east and west lodes running nearly parallel in the one on which pits are sunk; the lode is 4 ft. wide, producing  $\frac{1}{2}$  ton of lead ore per fathom, at only 5 fms. in depth, which has a northern underlie, and the other on Ranters lode having a southern underlie; I believe in going to a depth of 20 fms. or so you will meet with the lode, and a body of lead ore. An adit level can be driven on the course of the lode, which will prove beneficial for the mine and erection of dressing-floor, &c. On the north side of the sett there is a shaft sunk on a north and south lode, which is producing copper mixed with gossan; I should also recommend that an adit level be also driven at this point on the course of the lode; by so doing you will meet with a junction which no doubt will produce a large body of ore, as every indication plainly shows. There is also in another part being within a distance of one mile of the railway station, and materials can be procured at a reasonable rate. In conclusion, I feel confident in going to a depth of 30 to 40 yards in this mineral ground you will find a large body of lead and copper ores.

JOHN LESTER.

ON SALE.—ONE 16-horse PORTABLE ENGINE, by MARSHALL, of Gainsborough; new last year; with the latest improvements; in excellent condition; worked seven months only.

Apply to SCOTT and EDWARDS, Railway Contractors, near Runcorn.

**IN RE THE CARDIGAN BAY CONSOLS MINING COMPANY (LIMITED). IN LIQUIDATION.**

VALUABLE LEAD MINES, in LANDS called GWAR-CWM-BACH, GWAR-CWM-188A, GWAR-CWM-UCHA, and PENSARN, situate in the parishes of LLANCFYNNAIL and LLANFANGELL-GENEUG-GLYN, in the county of CARDIGAN, about blue miles from Aberystwyth, held for an Unexpired Term of nearly Nineteen Years, together with the costly PLANT and MACHINERY in excellent condition, which will be SOLD BY AUCTION, at the Mart, Tokenhouse-yard, London, E.C., on Tuesday, the 3rd day of October, 1871, at Twelve for One o'clock, by Mr. ROBERT L. CURTIS (the Liquidator).

Particulars, with conditions of sale, may be had of E. G. ELWES, Esq., Solicitor, 8, Farnival's Inn, Holborn; of Capt. RICHARD WILLIAMS, Goginan, Aberystwyth; and of the Liquidator, 8, Union-court, Old Broad-street, London, E.C.

**THE COMPANIES ACT, 1862 AND 1867. IN THE MATTER OF THE PENHALE UNITED SILVER-LEAD MINING COMPANY (LIMITED).**

THE LIQUIDATOR of the ABOVE-NAMED COMPANY invites TENDERS for the PURCHASE of the whole of the property belonging to the said company, comprising the COMPANY'S INTEREST in the LEASES of the valuable MINES, known as the

**PENHALE AND LOMAX SILVER-LEAD MINES.**

Situate in PERRANZABULOE, in the county of CORNWALL, which have been extensively developed, together with the whole of the valuable ENGINES, PLANT and MACHINERY, BUILDINGS, DRESSING APPARATUS, PITWORK, and STORES.

The mines have been opened up to a very great extent, and are supplied with all the necessary machinery for their further development.

Tenders, addressed to the Liquidator as below, should be sent in not later than the 16th day of October next.

Permission to inspect the mines and the leases, together with the full inventory of plant and machinery, conditions, and all other particulars, may be obtained of the Liquidator.

Mr. FREDERICK WARWICK, at his offices, 25, Bucklersbury, London.

**TITANIC STEEL AND IRON COMPANY (LIMITED).**

STEEL AND IRONWORKS FOR SALE, BY PRIVATE TREATY.

THE LIQUIDATOR of the ABOVE-NAMED COMPANY is prepared to TREAT for the SALE, by private arrangement, as a going concern, of the WHOLE of the company's VALUABLE FREEHOLD MANUFACTURING PREMISES, known as

**THE FOREST STEEL WORKS.**

Situate at COLEFORD, in the FOREST OF DEAN, GLOUCESTERSHIRE, extending over an area of about SEVEN ACRES, together with all the WORKSHOPS, FORGE, STOREHOUSES, OFFICES, PLANT and MACHINERY; also some valuable PATENTS, LICENSES, and LEASES, including LEASE of DARKHILL and SHUTCASTLE COLLIERIES.

Full particulars and orders to inspect the works can be obtained on application to ROBERT FLETCHER, 2, Moorgate-street, London, E.C., the Liquidator; R. WOODWARD, Forest Steelworks, Coleford; or to ALFRED DAVY, Engineer, Sheffield.

The usual business of the company is meanwhile carried on at the works.

**TO BE SOLD, pursuant to a Decree of the High Court of Chancery, made in a Cause of "MARSHALL v. CROWTHER," with the approval of the Vice-Chancellor Sir JOHN WICKES, by Messrs. CHESHIRE and GILSON, the persons appointed by the said Judge, at the George Hotel, Walsall, in the county of Stafford, on Wednesday, the 25th day of October, 1871, at Three o'clock in the afternoon precisely, in Eighteen Lots, a certain****FREEHOLD ESTATE, called BESCOTT,**

Consisting of BESCOTT HALL, and several FARMS and BUILDING SITES (with the valuable MINES and MINERALS thereon), situate in the parishes of WALSALL and WEDNESBURY, in the county of STAFFORD, late the property of William Crowther, deceased.

Printed particulars and conditions of sale, and lithographed plans, may be had (gratis) in London, of Messrs. CLARKE, WOODCOCK, and RYLAND, 14, Lincoln's Inn-fields; Messrs. VIZARD, CROWDER, ANSTIE, and YOUNG, 55, Lincoln's Inn-fields; Messrs. CUNLIFF and BEAUMONT, 43, Chancery-lane; Messrs. THOMAS WHITE and SONS, Bedford-row; Mr. THOMAS PRICE, Abchurch-lane, City; and Mr. C. W. CATELL, 40, Bedford-row; and in the country of Mr. W. MARSHALL, Darlaston, near Wednesbury; of Messrs. FRANK and GARRARD, Evesham; of Mr. W. B. APLES, Banbury; of Mr. J. CROWTHER SMITH, Wolverhampton; of Mr. S. P. SMITH, Walsall; of Mr. W. G. CUMBERS, Wolverhampton; and of the Auctioneers, New-street, Birmingham; and at the place of sale.

H. F. CHURCH, Chief Clerk.

CLARKE, WOODCOCK, and RYLAND, 14, Lincoln's Inn-fields (Solicitors for Plaintiff).

Dated this 9th day of August, 1871.

**CHILIAN COPPER MINES, AND MINING PROPERTY.**

TO BE SOLD, pursuant to an Order of the High Court of Chancery, made in a Cause of "WATERS v. WATERS," with the approval of the Master of the Rolls, at the Auction Mart, Tokenhouse-yard, Lothbury, in the City of London, at Two o'clock precisely, on Tuesday, the 9th day of January, 1872, by Mr. ROBERT C. DRIVER (of the firm of Messrs. Driver, Whitehall, London), the Auctioneer appointed by the said Judge to sell the same.

THE WHOLE of the EXTENSIVE and RICH COPPER MINES, PARTS OF MINES, MINING PROPERTY and MATERIALS, and FREEHOLD PROPERTIES in CHILI, with the STORES and BUSINESSES carried on in connection with the said Mines, forming part of the Chilean Estate of Sampson Waters, late of Gyllyngdune, in the county of Cornwall, Esq., deceased. The Mines consist of—

- 1.—THE ENTIRETY of the SAN PEDRO MINE.
- 2.—TWO-THIRDS of the celebrated DESCUBRIDORA MINE, with the adjoining SETTS of SAN JUAN, VANCHAS, and SAN FRANCISCO.
- 3.—THREE-FOURTH PARTS of the COLORADO (SILVER) MINE.
- 4.—NINE FORTY-EIGHTH PARTS of the JUANA (SILVER) MINE.
- 5.—THE ENTIRETY of the SANTA ELENA COPPER MINE.
- 6.—THE ENTIRETY of the CUBA COPPER MINE.
- 7.—THE ENTIRETY of the SAN ANTONIO MINE.

San Pedro Mine, situate about 60 miles from the port of Chancay, has given immense riches, but owing to a run a new shaft had to be sunk 122 fathoms from the surface, and is now communicated with the lode at this depth. The lode is composed of black and yellow sulphurets, of a produce of 60 per cent. for copper. The barrows are large, and will pay for working over, having water sufficient in the mine to do so. A good well of pure water is near to and belongs to the mine.

The Descubridora Mine has been working since 1859, and has yielded large profits from that date, and continues to do so. It is now down to the 94 ft. level, and has been rich from the surface. The ore is lengthening, the average width of the vein being from 30 to 80 feet, composed of yellow sulphurets. The burrows, by applying steam crushers, will yield large returns. Within the last few months two new steam-engines have been erected at a cost of £6000, and are now at work; these will increase the returns. The engines are one of 20-horse power for drawing, and one of 8-horse power for crusher. The mine is in thorough working order, and well stocked with materials, rails, jiggers, crushers, &c.

The adjoining setts of San Juan, Canchas, and San Francisco were acquired for the purpose of securing the ground in all directions round the Descubridora Mine, and they have since been worked on a limited scale. The Canchas is making a small profit. San Juan and San Francisco are being worked at a trifling loss. The other mines above mentioned are promising concerns.

Remunerative shops and stores are attached to the mines, and are carried on in conjunction with the mines.

The other property which will be offered for sale consists of an entirety of FREEHOLD DWELLING HOUSES, STORES, SHOPS, WATERING PLACE, TIMBER MATERIALS, ORE FLOORS, and other property (including a large condensing apparatus), situated at Chancay, Chancayito, Coplapo, and Tres Puntas; the Quilchigul establishment, or watering place, with the dwelling house, store yard, carts, and mules; two-thirds of the Vega establishment, with the yards, houses, shops, and stores; two-thirds of the dwelling-houses and seven-eighths of the watering place at Tres Puntas, and one moiety of the watering place at Punta Negra.

Plans of the San Pedro and Descubridora Mines, and printed particulars and conditions of sale may be obtained of Messrs. PRICE, BOLTON, and FIDLER, of Lincoln's Inn, London; of Mr. S. T. G. DOWNING, Solicitor, Redruth, Cornwall; of Mr. THOMAS WATT, the Receiver and Manager at the Mines, Chili; of Messrs. FRESHFIELDS, Solicitors, Bank-buildings, London; of Mr. W. C. SMITH, 48, Lincoln's Inn-fields, London; of Mr. CHARLES NORTON, Solicitor, Swansea; or of Messrs. ROSCOE and SONS, Solicitors, Farnham; and of Messrs. COOKE, KINGDON, and COTTON, Solicitors, Bedford-row, London; and of Messrs. DRIVER, Surveyors, Land Agents, and Auctioneers, 4, Whitehall, London.

ROBERT MARSHALL, Chief Clerk.

PRICE, BOLTON, and FIDLER, Lincoln's Inn (Agents for S. T. G. Downing, Redruth, Cornwall, Plaintiff's Solicitor).

Dated 2nd August, 1871.

**PRELIMINARY ANNOUNCEMENT.**

THE FISHBURN ESTATE, situate in the Parish of SEDGEFIELD, in the County of DURHAM, belonging to CHRISTOPHER WATKIN, Esq.

THE MANSION OF FISHBURN HALL, several FARMS of FREEHOLD LAND, containing in the aggregate about 663 acres, with the valuable SEAMS of COAL thereunder, and also a COPYHOLD ESTATE adjoining, containing about 36 acres.

WILL BE OFFERED FOR SALE, BY PUBLIC AUCTION, at the King's Head Inn, Darlington, in the month of October next.

ALLISON, SON, AND WILLAN, Solicitors, Darlington.

September 14, 1871.

**FOR SALE.—the PUMPING MACHINERY recently in use at the SILKSWORTH WINNING, near SUNDERLAND, consisting of FOUR LARGE QUADRANTS, with attachments, complete; 40 21 in. PUMPS, and 20 20 in. PUMPS, with working barrels and other working pieces, complete; 42 pairs of SPEAR PLATES; WOOD SPEARS; BOLTS; CRABS; 300 fms. of 7 in. GALVANISED WIRE CRAB ROPE, &c., &c.**

The whole of the best workmanship and material, and can be viewed daily at the colliery.

Apply to Mr. JOHN DAGLISH, Silksworth Colliery, Sunderland.

**BLAENAVON IRONWORKS, NEAR NEWPORT.**

SEPTEMBER 19, 1871.

**THE BLAENAVON IRON AND STEEL COMPANY (LIMITED)**

are prepared to RECEIVE TENDERS from Manufacturers for the SUPPLY of OILS, GREASES, TALLOW, CANDLES, STEEL, FILES, CHAINS, ROPES, BLASTING POWDER, SHOVELS, IRONMONGERY, &c., in such quantities as they may require, from 2nd October, 1871, to 31st March, 1872, delivered free at their stores, Blaenavon.

For further particulars, and forms of tender, apply to the General Manager, Blaenavon Ironworks.

Tenders to be endorsed "Tender for Stores." The company do not bind themselves to accept the lowest or any Tender. By order.

**FOR SALE, at the EAST HARTREE LEAD WORKS, a capital BLAST ENGINE, 20-horse power (nominal), condensing, beam, 18 in. cylinder, 4 ft. stroke, with Cornish TUBE BOILER, 21 ft. long by 6 ft. diameter, all in good working order. No reasonable offer will be refused.**

WANTED, TO PURCHASE, for the above works, a good SECONDHAND WEIGHBRIDGE, complete, to weigh 3 tons.

Address, Mr. HORNBLLOWER, the Manager, at the works, East Hartree, near Bristol.

**FOR SALE, separately, at reduced prices, the VALUABLE TOOLS and OTHER APPLIANCES used at New Dock Works, Leeds, in the manufacture of railway plant, wagon and carriage building, general engineering, &c., &c.**

For prices and particulars, apply to Mr. JAMES POWELL, Consulting Engineer and Valuer of Engineering Plant, &c., 80, Basinghall-street, Leeds.

**FOR SALE, BY PRIVATE CONTRACT.—**

- ONE 42 in. PUMPING ENGINE.
- ONE 30 in. PUMPING ENGINE.
- ONE 30 in. STAMPING ENGINE.
- ONE 22 in. WINDING ENGINE.

Several good BOILERS, from 8 to 12 tons each. Also, about 90 fms. of 7 in. FLAT RODS, complete.

A large quantity of FITWORK, from 7 in. to 16 in., and many other articles in general use in mining. Apply to—

MICHELL AND JENKIN, Engineers, Redruth.

**LEAD MINES IN THE COUNTIES OF DURHAM AND NORTHUMBERLAND.**

TO BE LET, ON LEASE, the HUNSTANWORTH and NEWBIGGIN ROYALTIES, the former about 3534 acres, and the latter 200 acres, or thereabouts.

The Hunstanworth Royalty adjoins the celebrated W. B. Lead Mines, and has for many years yielded large quantities of lead ore, and much of the ground is undeveloped.

Incomeless lessees can have the plant and machinery, now upon the premises, at an annual rent, with a right to purchase at any time during the lease, on terms to be agreed upon.

For particulars, apply to JOSEPH DODDS, Esq., M.P., No. 4, Spring-gardens, Charing Cross, London, S.W., and Stockton-on-Tees: Mr. NATHANIEL CLARK, Beamish-park, Fence Houses; or Mr. THOMAS J. BEWICK, C.E., No. 2, Westminster-chambers, Victoria-street, London, S.W., and Haydon Bridge, Northumberland.

**CHILTON MINES.**

TO BE LET, the COAL MINES within and under the CHILTON ESTATE, the property of the Right Hon. the Earl of Eglon. The Estate is situated near FERRY HILL, in the County of DURHAM, and contains 1240 surface acres, or thereabouts. The North-Eastern main line, and West Hartlepool main line, and branch lines of railway intersect the estate.

For particulars, apply to JOHN JOHNSON, C.E., Chilton Hall, Ferry Hill.

**SOUTH WALES SMOKELESS STEAM COAL.**

TO BE LET, ON LEASE, a COLLIERY, now working on the above, with a WORKABLE AREA of over FIVE HUNDRED AND NINETY ACRES. Railway through the property; eight miles from Port; coal on Government List.

For particulars, apply to Mr. LEYSON RHYS, Mining Engineer, Aberdare, South Wales.

**TO BE LET, ON LEASE, for a term of years, SEVERAL ACRES of LAND, suitable for MANUFACTURING PURPOSES, advantageously situated on the south bank of the River Tyne, about two miles below Newcastle-on-Tyne, and within a quarter of a mile from the North-Eastern Railway. There is a good quay frontage, with deep water.**

Apply to Mr. T. S. BRAMWELL, King-street, Quay-side, Newcastle-on-Tyne.

**SECONDHAND MACHINERY, &c., FOR SALE.**

TWO IRISH PATENT WROUGHT-IRON TURNTABLES, 12 ft. diameter, quite equal to new.

TWO EGG-ENDED BOILERS, 35 ft. by 6 ft., suitable for work, with all fittings, quite new, never erected.

SEVERAL SETS BAR SHEARS, with and without engines.

TWENTY CAMERON'S DONKEY PUMPS, 3 in. rams.

ARMOUR PLATE PLANING MACHINE, quite new.

TWO 50 ton STEAM SWING CRANES, not quite finished.

FOUR STEEL BOILERS, 30 ft. by 5 ft. 6 in., and part fittings, in good order.

SEVERAL BEAM, HORIZONTAL, &c., ENGINES.

ONE Thompson's 8-horse patent ROAD STEAMER, with india-rubber tyres.

ONE 10-horse ditto, both equal to new.

FOUR 6 ton WAGONS, for ditto.

TWO 14 horse patent self-propelling PORTABLE ENGINES, with winding drums, reversing gear, &c., self contained, suitable for winding, hoisting, or ploughing.

TWO 12 horse ditto ditto.

ONE 8-horse PORTABLE ENGINE, by Garrett; TWO 6 horse ditto—all in excellent condition.

6 in. SLOTTING MACHINE; DRILLING, PLANING, &c., MACHINES—to be sold, cheap. Apply to—

WHEATLEY KIRK AND PRICE, 35, Princess-street, Manchester.

**SURPLUS MACHINERY ON SALE.**

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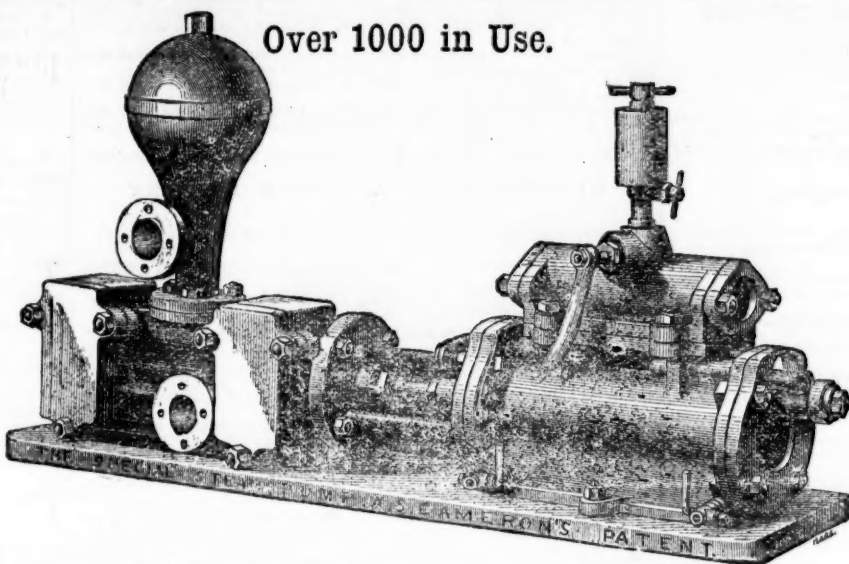
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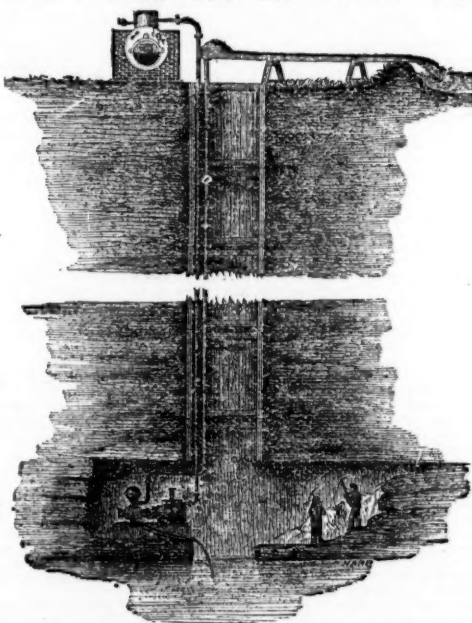
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Diameter of Steam Cylinder .....	inches	2½	3	4	4	6	6	6	7	7	7	8	8	8	8	10	10	12	12	14	16	26
Diameter of Water Cylinder .....	inches	1½	1½	2	4	3	4	6	5	6	7	4	6	7	8	6	7	8	10	8	7	6½
Length of Stroke .....	inches	6	9	9	12	12	12	12	12	12	12	12	12	12	18	12	12	18	24	48	24	72
Strokes per minute .....		100	100	70	50	50	50	50	50	50	50	50	50	50	35	50	50	35	—	—	—	—
Gallons per hour .....		310	680	815	3250	1830	3250	7330	5070	7330	9750	3250	7330	9750	13,000	7330	9750	13,000	—	—	—	—
PRICE .....		£10	£15	£20	£35	£30	£40	£47 10	£50	£52 10	£57 10	£50	£55	£65	£85	£70	£80	£100	—	—	—	—

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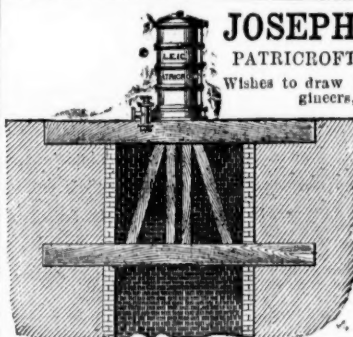
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1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871

Shares.	Mines.	Divid.	Last Pr.	Business.	Total Divs.	Per share.	Last paid.
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871

Shares.	Mines.	Divid.	Last Pr.	Business.	Total Divs.	Per share.	Last paid.
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871

Shares.	Mines.	Divid.	Last Pr.	Business.	Total Divs.	Per share.	Last paid.
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871

Shares.	Mines.	Divid.	Last Pr.	Business.	Total Divs.	Per share.	Last paid.
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871

## NON-DIVIDEND MINES.

Shares.	Mines.	Divid.	Last Pr.	Business.	Total Divs.	Per share.	Last paid.
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871
1000	Albermarle, s. i. Llandidloes	10 0 0	1 1/4	10 11 8	0 5 0	10 11 8	July 1871

b, waste; cl, coal; c, copper; g, gold; l, lead; s, silver.